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STATIC AND CONTROL INVESTIGATIONS ON AN 0.030-SCALE  
SPACE SHUTTLE ORBITER CONFIGURATION 140A/B MODEL

IN THE AMES RESEARCH CENTER

11- BY 11-FOOT TRANSONIC WIND TUNNEL (0A53A)

VOLUME I of II

by

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by

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Houston, Texas



WIND TUNNEL TEST SPECIFICS:

Test Number: ARC 11-747  
NASA Series Number: OA53A  
Model Number: 47-0  
Test Dates: 19 through 27 November 1973  
Occupancy Hours: 160

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By M. E. Nichols, Rockwell International Space Division

ABSTRACT

This report presents data obtained from a wind tunnel test of an 0.030-scale model of the Rockwell International Configuration 140A/B Space Shuttle Vehicle Orbiter in the Ames Research Center 11- by 11-Foot Transonic Wind Tunnel. This test was conducted from 19 November to 27 November 1973, in 160 test hours.

This part (part A) of test series 0A53 was conducted at Mach numbers of 0.6, 0.8, 0.9, 1.05, and 1.20, and at Reynolds numbers from  $1.8 \times 10^6/\text{ft}$  to  $6.5 \times 10^6/\text{ft}$ .

The objective of this test was to establish and verify longitudinal and lateral-directional aerodynamic performance, stability, and control characteristics for the Configuration 140A/B SSV Orbiter. Reynolds number studies were performed for certain nominal control-settings. An alternate leading-edge wing configuration and sealed elevon-split arrangement were tested. Bodyflap, elevon, speedbrake, and rudder hinge moments were measured in addition to standard six-component forces and moments and base pressure data. Furthermore, six-component force and moment data were measured for the vertical tail assembly. The model was investigated through angles

of attack from  $-3^{\circ}$  to  $+28^{\circ}$  at  $0^{\circ}$  angle of yaw and through angles of sideslip from  $-5^{\circ}$  to  $+9^{\circ}$  at  $0^{\circ}$ ,  $10^{\circ}$ , and  $20^{\circ}$  angle of pitch

This report is published in two volumes. Volume I contains Data Figures 4 through 29. Volume II contains Data Figures 30 through 51, and the Tabulated Source Data.

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CL versus CD
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CN versus CLMFWD  
CL versus CD  
DCL, DCD, DCA, DCAF, DCAB, DCN, DCMFWD, DCMAFT versus ALPHA
- (C) CY, CYN, CBL, versus BETA
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- (I) CHET, CHEI, CHEO versus ALPHA
- (J) CHBF versus ALPHA
- (K) CHR, CHUL, CHLL, CHUR, CHLR versus BETA
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- (P) CHET, CHEI, CHEO versus RUDDER
- (Q) CHBF versus RUDDER
- (R) CHR, CHUL, CHLL, CHUR, CHLR versus AILRON
- (S) CHBF versus AILRON
- (T) CHET, CHEI, CHEO versus ELEV-L
- (U) CHEI, CHEO versus ALPHA
- (V) CHUL, CHLL, CHUR, CHLR versus BETA
- (W) DCY/DA, DCYNDA, DCBLDA, DCLMDA versus ALPHA

# NOMENCLATURE

Symbol	SADSAC Symbol	Definition
Body Axis		
$C_N$	CN	normal-force coefficient
$C_A$	CA	axial-force coefficient
$C_{A_F}$	CAF	forebody axial-force coefficient
$C_m$	CL <i>i</i>	pitching-moment coefficient
$C_Y$	CY	side-force coefficient
$C_n$	CYN	yawing-moment coefficient
$C_l$	CBL	rolling-moment coefficient
Stability Axis (Coefficients utilizing $C_A$ )		
$C_L$	CL	lift coefficient
$C_D$	CD	drag coefficient
$C_m$	CLM	pitching-moment coefficient
$C_{n_s}$	CLN	stability yawing-moment coefficient
$C_{l_s}$	CSL	stability rolling-moment coefficient
Stability Axis (Coefficients utilizing $C_{A_F}$ )		
$C_{L_F}$	CLF	forebody lift coefficient
$C_{D_F}$	CDF	forebody drag coefficient

$C_{m_F}$	CMF	forebody pitching-moment coefficient
L/D	L/D	lift-to-drag ratio
$L_F/D_F$	LF/DF	forebody lift-to-drag ratio
$X_{CP}/l_B$	XCP/L	longitudinal center of pressure location of total vehicle, percent reference body length
$\alpha$	ALPHA	angle of attack, degrees
$\beta$	BETA	angle of sideslip, degrees
M	MACH	free-stream Mach number
$P_0$	PO	free-stream static pressure, psia
$P_T$	PT	total pressure, psia
q	Q	free-stream dynamic pressure (psf)
RN/ft	RN/L	unit Reynolds number, per foot
TTAV	TTAV	average total temperature, deg. R

#### Vertical Tail Data

##### Body Axis

$C_{N_V}$	CNV	vertical normal-force coefficient
$C_{A_V}$	CAV	vertical axial-force coefficient
$C_{m_V}$	CMV	vertical pitching-moment coefficient
$C_{Y_V}$	CYV	vertical side-force coefficient
$C_{n_V}$	CYNV	vertical yawing-moment coefficient
$C_{l_V}$	CBLV	vertical rolling-moment coefficient

# Pressure Coefficients and Pressure Corrections

$C_{P_{B_i}}$	CPBI	pressure coefficient for individual base pressures
$C_{P_B}$	CPB	average base pressure coefficient
$C_{P_{SC_j}}$	CPSCJ	pressure coefficient for individual sting-cavity pressures
$C_{P_{SC}}$	CPSC	average sting-cavity pressure coefficient
$C_{A_B}$	CAB	base axial-force coefficient
$C_{A_{SC}}$	CASC	sting-cavity axial-force coefficient

## Hinge Moments

$C_{H_R}$	CHR	rudder hinge-moment coefficient
$C_{H_{E_I}}$	CHEI	inboard elevon hinge-moment coefficient
$C_{H_{E_O}}$	CHEO	outboard elevon hinge-moment coefficient
$C_{H_{E_T}}$	CHET	total elevon hinge-moment coefficient
$C_{H_{UL}}$	CHUL	speedbrake hinge-moment coefficient (upper left)
$C_{H_{LL}}$	CHLL	speedbrake hinge-moment coefficient (lower left)
$C_{H_{UR}}$	CHUR	speedbrake hinge-moment coefficient (upper right)
$C_{H_{LR}}$	CHLR	speedbrake hinge-moment coefficient (lower right)

$C_{H_{BF}}$	CHBF	bodyflap hinge-moment coefficient
$C_{H_{SB}}$	CHSB	total speedbrake hinge-moment coefficient
$C_{P_{V_1}}$	CPV1	pressure coefficient for $P_{V_1}$
$C_{P_{V_2}}$	CPV2	pressure coefficient for $P_{V_2}$
$C_{P_{V_3}}$	CPV3	pressure coefficient for $P_{V_3}$
$C_{P_{V_4}}$	CPV4	pressure coefficient for $P_{V_4}$
$C_{A_{VB}}$	CAVB	vertical tail base axial-force coefficient
$\frac{x_{CP_V}}{l_B}$	XCPV/L	longitudinal center-of-pressure location of vertical tail forces
$\frac{z_{CP_V}}{l_B}$	ZCPV/L	vertical center-of-pressure location of vertical tail forces
$P_{V_1}, P_{V_2}, P_{V_3}, P_{V_4}$		pressure on vertical tail at stations 1, 2, 3, 4 respectively, psia

NOMENCLATURE (Continued)  
ADDITIONS TO NOMENCLATURE

$C_{mFWD}$	CLMFWD	pitching moment coefficient (FWD C.G.)
$C_{mAFT}$	CLMAFT	pitching moment coefficient (AFT C.G.)
$\delta_{eL}$	ELEV-L	left elevon deflection
$\Delta C_L$	DCL	incremental lift coefficient
$\Delta C_D$	DCD	incremental drag coefficient
$\Delta C_A$	DCA	incremental axial force coefficient
$\Delta C_{AF}$	DCAF	incremental forebody axial force coefficient
$\Delta C_{AB}$	DCAB	incremental base axial force coefficient
$\Delta C_N$	DCN	incremental normal force coefficient
$\Delta C_{mFWD}$	DCMFWD	incremental pitching moment coefficient (FWD C.G.)
$\Delta C_{mAFT}$	DCMAFT	incremental pitching moment coefficient (AFT C.G.)
$\Delta C_y$	DCY	incremental side force coefficient
$\Delta C_n$	DCYN	incremental yawing moment coefficient
$\Delta C_\ell$	DCBL	incremental rolling moment coefficient
$C_{Y_{\delta_{SB}}}$	DCY/DS	side force coefficient derivative with respect to speed brake deflection. Algebraic difference of the side force coefficient of two runs divided by the algebraic difference of the speed brake angle of the runs; per degree.
$C_{n_{\delta_{SB}}}$	DCYNDS	yawing moment coefficient derivative with respect to speed brake deflection. Algebraic difference of the yawing moment coefficient of two runs divided by the algebraic difference of the speed brake angle of the runs; per degree

# NOMENCLATURE (Continued)

$C_{l_{\delta_{SB}}}$	DCBLDS	rolling moment coefficient derivative with respect to speed brake deflection. Algebraic difference of the rolling moment coefficient of two runs divided by the algebraic difference of the speed brake angle of the runs; per degree.
$C_{m_{\delta_{SB}}}$	DCLMDS	pitching moment coefficient derivative with respect to speed brake deflection. Algebraic difference of the pitching moment coefficient of two runs divided by the algebraic difference of the speed brake angle of the runs; per degree.
$C_{m_{\delta_a}}$	DCLMDA	pitching moment coefficient derivative with respect to aileron deflection. Algebraic difference of the pitching moment coefficient of two runs divided by the algebraic difference of the total aileron deflection angle of the runs; per degree.
$C_{m_{\delta_r}}$	DCLMDR	pitching moment coefficient derivative with respect to rudder deflection. Algebraic difference of the pitching moment coefficient of two runs divided by the algebraic difference of the total rudder deflection of the runs; per degree.
$C_{H_{SB_{\delta}}}$	DCHDSB	speed brake hinge moment derivative with respect to speed brake deflection. Algebraic difference of the speed brake hinge moment coefficient of two runs divided by the algebraic difference of the speed brake deflection angle of the runs; per degree.
$\Delta\delta_a$	DA	algebraic difference of aileron deflection angle between two runs; degrees.
$\Delta\delta_e$	DE	algebraic difference of elevon deflection angle between two runs; degrees.
$\Delta\delta_r$	DR	algebraic difference of rudder deflection angle between two runs; degrees.
$\Delta\delta_{BF}$	DBF	algebraic difference of body flap deflection angle between two runs; degrees.
$\delta_a$	AILRON	aileron, total aileron deflection angle, degrees, (left aileron - right aileron)/2.



# NOMENCLATURE (Concluded)

$\delta_{BF}$	BDFLAP	body flap, surface deflection angle; degrees.
$\delta_e$	ELEVON	elevon, surface deflection angle; degrees.
$\delta_r$	RUDDER	rudder, surface deflection angle; degrees.
$\delta_{SB}$	SPDBRK	speedbrake, split rudder inclusive deflection angle between outer surfaces; degrees.

# CONFIGURATION INVESTIGATED

The Rockwell International Configuration 140A/B Space Shuttle Vehicle Orbiter was the subject of the OA53 test series. An 0.030-scale Orbiter model was used. Sealed elevon-split and alternate wing leading-edge investigations were carried out. Various elevon, aileron, bodyflap, speed-brake, and rudder deflections were tested.

The following nomenclature designated model components:

Component	Description
B <sub>26</sub>	140A/B fuselage (VL70-000140A, VL70-000145, VL70-000140B, VL70-000143A, VL70-000139)
C <sub>9</sub>	140A/B basic canopy (VL70-000140A, VL70-000143A)
E <sub>26</sub>	Basic 140A/B elevons (VL70-000200, VL70-006089, VL70-006092)
F <sub>9</sub>	140A/B bodyflap (VL70-000140B, VL70-000200)
M <sub>7</sub>	OMS/RCS pods for 140A/B Orbiter
N <sub>28</sub>	OMS basic nozzles for 140A/B configuration
R <sub>5</sub>	Basic Orbiter rudder (VL70-000146A, VL70-000095)
V <sub>8</sub>	Basic Orbiter vertical tail (VL70-000140A, VL70-000146A)
W <sub>116</sub>	Basic 140A/B wing (VL70-000140B, VL70-000200)
W <sub>121</sub>	Alternate leading-edge wing configuration (VL70-000219, VL70-000200, VL70-006089, VL70-006092)

Reference dimensions and constants for Orbiter data were:

Symbol	Definition	Value
A <sub>B</sub>	(see below for base areas) $\sum_{i=1}^6 A_{B_i}$	0.298472 ft <sup>2</sup>

$A_{SC}$	Sting-cavity area	0.07670 ft <sup>2</sup>
$b_w$	Reference wing span	28.1004 inches
$\bar{c}_w$	Reference MAC	14.244 inches
$l_B$	Reference body length (IML)	38.709 inches
$S_w$	Reference wing area	2.4210 ft <sup>2</sup>
$x_{CG}$	Longitudinal length, nose to moment reference center	25.251 inches
$y_{CG}$	Lateral length, plane of symmetry to moment reference center	0.000 inch
$z_{CG}$	Vertical length, FRP to moment reference center	-0.750 inch
$\bar{c}_E$	Elevon chord	2.7210 inches
$\bar{c}_R$	Rudder chord	2.2110 inches
$\bar{c}_{SB}$	Speedbrake chord	2.2110 inches
$\bar{c}_{BF}$	Bodyflap chord	2.541 inches
$S_E$	Reference elevon area	0.18900 ft <sup>2</sup>
$S_R$	Reference rudder area	0.090135 ft <sup>2</sup>
$S_{SB}$	Reference speedbrake area	0.090135 ft <sup>2</sup>
$S_{BF}$	Reference bodyflap area	0.12834 ft <sup>2</sup>

Orbiter Base Areas (ft<sup>2</sup>)

$A_{B_1}$  0.050764

$A_{B_2}$  (OMS) 0.087153

$A_{B_3}$  0.033333

$A_{B_4}$  0.060069

$A_{B_5}$  0.028472

$A_{B_6}$  0.038681

## TEST FACILITY DESCRIPTION

The Ames Research Center Unitary Plan 11- by 11-Foot Transonic Wind Tunnel is a closed-circuit, air-medium, variable-density facility capable of attaining Mach numbers from 0.6 to 1.4 at Reynolds numbers from  $1.7 \times 10^6/\text{ft}$  to  $9.4 \times 10^6/\text{ft}$ . The test section is 22 feet long, and models are installed on internal strain-gauge balances mounted to sting-type support systems.

Shadowgraph and Schlieren photographic equipment is available, and pressure transducer instrumentation is provided.

Tunnel operating temperature is 580°R. Extended high Reynolds number runs are restricted by power availability.

## DATA REDUCTION

### A. Data Reduction for the Orbiter

Standard ARC methods were used to compute coefficient data.

One set of body- and two sets of stability-axis data are used. The first stability-axis data set has the axial-force coefficient corrected to the base pressure, whereas the second stability-axis data set has the axial-force coefficient corrected to free-stream pressure.

The following outputs are some of those required for data presentation.

Pressure coefficient was computed for each pressure ( $P_{B_i}$ ) as follows:

$$C_{P_{B_i}} = \frac{P_{B_i} - P_o}{q}$$

where

$P_{B_i}$  = pressure at base orifice i

$P_o$  = free-stream static pressure

$q$  = free-stream dynamic pressure

Pressure coefficient was computed for each sting-cavity pressure ( $P_{SC_j}$ ) as follows:

$$C_{P_{SC_j}} = \frac{P_{SC_j} - P_o}{q}$$

where

$P_{SC_j}$  = pressure at sting-cavity orifice j

Average (area-weighted) base pressure coefficient was computed as follows:

$$C_{P_B} = \frac{P_B - P_o}{q}$$

where

$$P_B = \frac{\sum_{i=1}^6 P_{B_i} A_{B_i}}{\sum_{i=1}^6 A_{B_i}}$$

and

6 = number of base pressures

$P_{B_i}$  = pressure at base orifice i

$A_{B_i}$  = area assigned to base orifice i

Average (numerically averaged) sting-cavity pressure coefficient was computed as follows:

$$C_{P_{SC}} = \frac{P_{SC} - P_o}{q}$$

where

$$P_{SC} = \frac{\sum_{j=1}^2 P_{SC_j}}{2}$$

and

2 = number of sting-cavity pressures

$P_{SC_j}$  = pressure at sting-cavity orifice j

Base axial-force coefficient was computed as follows:

$$C_{A_B} = \frac{-[C_{P_B} (A_B) + C_{P_{SC}} (A_{SC})]}{S_w}$$

where

$A_B$  = area of base (total)

$A_{SC}$  = area of sting-cavity

$S_w$  = wing reference area

Sting-cavity axial-force coefficient was computed as follows:

$$C_{A_{SC}} = \frac{-(F_{SC} - P_B) A_{SC}}{q S_w}$$

Axial-force coefficient adjusted to the average (area-weighted) base pressure was computed as follows:

$$C_A = C_{A_U} - C_{A_{SC}}$$

where

$C_{A_U}$  = axial-force coefficient unadjusted for base or sting-cavity pressures

Axial-force coefficient corrected to freestream static pressure (forebody axial-force coefficient) was computed as follows:

$$C_{A_F} = C_{A_U} - C_{A_B}$$

Center-of-pressure location, in percent of reference body length was computed as follows:

$$\frac{x_{CP}}{l_B} = \frac{x_{CG} - \frac{C_m \bar{c}_w}{C_N}}{l_B}$$

where

$x_{CG}$  = center-of-gravity location aft of model nose

$l_B$  = reference body length

Lift-to-drag ratios, based on each of the two sets of stability axis data were computed as follows:

$$\frac{L}{D} = \frac{C_L}{C_D}, \text{ based on } C_A$$



$$\frac{L_F}{D_F} = \frac{C_{L_F}}{C_{D_F}}, \text{ based on } C_{A_F}$$

Rudder hinge-moment coefficient was computed as follows:

$$C_{H_R} = \frac{HM_R}{q S_R \bar{c}_R}$$

where

$$HM_R = HM_{SB_{UL}} + HM_{SB_{LL}} - HM_{SB_{UR}} - HM_{SB_{LR}}$$

Inboard-elevon hinge-moment coefficient was computed as follows:

$$C_{H_{E_I}} = \frac{HM_{E_I}}{q S_E \bar{c}_E}$$

Outboard-elevon hinge-moment coefficient was computed as follows:

$$C_{H_{E_O}} = \frac{HM_{E_O}}{q S_E \bar{c}_E}$$

Total elevon hinge-moment coefficient was computed as follows:

$$C_{H_{E_T}} = C_{H_{E_I}} + C_{H_{E_O}}$$

Speedbrake hinge-moment coefficient was computed as follows:

$$C_{H_{SB_k}} = \frac{HM_{SB_k}}{q S_{SB} \bar{c}_{SB}}$$

where k = two upper and two lower speedbrake panels

Bodyflap hinge-moment coefficient was computed as follows:

$$C_{H_{BF}} = \frac{HM_{BF}}{q S_{BF} \bar{c}_{BF}}$$

## B. Data Reduction for Vertical Tail Instrumentation

Standard ARC methods were used to compute six-component data.

The data were reduced to coefficient form using the wing area ( $S_w$ ), wing chord ( $\bar{c}_w$ ), and wing span ( $b_w$ ). Moments were determined about the balance center, and then transferred to the model C.G.

Pressure coefficients were computed for vertical base pressures,  $P_{V_1}$  and  $P_{V_2}$  as follows:

$$C_{P_{V_{1,2}}} = \frac{P_{V_{1,2}} - P_0}{q}$$

Pressure coefficients were computed for vertical cavity pressures,  $P_{V_3}$  and  $P_{V_4}$  as follows:

$$C_{P_{V_{3,4}}} = \frac{P_{V_{3,4}} - P_0}{q}$$

Vertical tail base axial-force correction was computed as follows:

$$C_{A_{V_B}} = \frac{-[(C_{P_{V_2}} - C_{P_{V_3}}) A_{V_2} + C_{P_{V_1}} A_{V_1}]}{S_w}$$

Vertical tail axial-force coefficient corrected to freestream pressure was computed as follows:

$$C_{A_V} = C_{A_{V_U}} - C_{A_{V_B}}$$

where

$$C_{A_{V_U}} = \text{vertical tail axial-force coefficient unadjusted for base pressures}$$

Center-of-pressure locations on the vertical tail were computed as follows:

$$x_{CP_V} = x_{CG} - \frac{C_{n_{VBODY}} b_w}{C_{Y_{VBODY}}}$$

(where "BODY" means "body-axis")

$$z_{CP_V} = z_{CG} + \frac{C_{l_{VBODY}} b_w}{C_{Y_{VBODY}}}$$

Pressure coefficient for each extra "monitoring" pressure ( $P_{X_i}$ ) was computed as follows:

$$C_{P_{X_i}} = \frac{P_{X_i} - P_o}{q}$$

Reference dimensions and constants for the vertical tail were:

<u>Symbol</u>	<u>Comments</u>	<u>Value</u>
$A_{V_1}$	See figures	0.00625 ft <sup>2</sup>
$A_{V_2}$	See figures	0.01326 ft <sup>2</sup>
$S_w$	Given in previous section	
$b_w$	Given in previous section	
$l_B$	Given in previous section	
$x_{CG}$	Given in previous section	
$z_{CG}$	Given in previous section	

## REFERENCES

1. Rockwell International Space Division Technical Report No. SD73-SH-0276: "Pretest Information for Tests of the 0.030-Scale Space Shuttle Orbiter Force Model 47-0 in the NASA/Ames 11- by 11-Foot, 9- by 7-Foot, and 8- by 7-Foot Unitary Plan Wind Tunnel (OA53A,B,C)", by M. D. Milam, E. Chee, and M. E. Nichols, 19 October 1973.
2. Rockwell International Space Division Internal Letter No. SAS/WT0/73-205: "Model Design Requirements for the 0.030-scale Pressure/Loads Model 47-OTS", 20 June 1973.
3. NASA-CR-134, 119 (DMS-DR-2178); "Investigations on an 0.030-Scale Space Shuttle Vehicle Configuration 140A/B Orbiter Model in the Ames Research Center 9-by 7-foot Supersonic Wind Tunnel (OA53B)," by M. D. Milam, E. Chee, and M. E. Nichols, July 1974.
4. NASA-CR-134, 120 (DMS-DR-2185); "Investigations on an 0.030-Scale Space Shuttle Vehicle Configuration 140A/B Orbiter Model in the Ames Research Center Unitary Plan 8-by 7-foot Supersonic Wind Tunnel (OA53C)," by M. D. Milam, E. Chee, and M. E. Nichols, July 1974.

TABLE I.

TEST : OA53A		DATE : 11/16/73	
TEST CONDITIONS			
MACH NUMBER	REYNOLDS NUMBER (per unit length)	DYNAMIC PRESSURE (pounds/sq. inch)	STAGNATION TEMPERATURE (degrees Fahrenheit)
0.60	$1.79 \times 10^6/\text{ft}$	1.45	120
0.60	$3.00 \times 10^6/\text{ft}$	2.46	120
0.60	$3.96 \times 10^6/\text{ft}$	3.33	120
0.60	$6.47 \times 10^6/\text{ft}$	5.44	120
0.80	$2.10 \times 10^6/\text{ft}$	2.16	120
0.80	$2.97 \times 10^6/\text{ft}$	3.09	120
0.80	$4.23 \times 10^6/\text{ft}$	4.46	120
0.80	$5.46 \times 10^6/\text{ft}$	5.77	120
0.90	$2.19 \times 10^6/\text{ft}$	2.49	120
0.90	$2.98 \times 10^6/\text{ft}$	3.38	120
0.90	$3.75 \times 10^6/\text{ft}$	4.28	120
0.90	$4.77 \times 10^6/\text{ft}$	5.50	120
1.05	$2.30 \times 10^6/\text{ft}$	2.96	120
1.05	$3.00 \times 10^6/\text{ft}$	3.73	120
1.05	$3.50 \times 10^6/\text{ft}$	4.38	120
1.05	$4.51 \times 10^6/\text{ft}$	5.63	120

BALANCE UTILIZED: 2.5" Mk XX

	CAPACITY:	ACCURACY:	COEFFICIENT TOLERANCE:
NF	<u>3000 lb</u>	<u>          </u>	<u>          </u>
NA	<u>3000 lb</u>	<u>          </u>	<u>          </u>
SF	<u>1500 lb</u>	<u>          </u>	<u>          </u>
SA	<u>1500 lb</u>	<u>          </u>	<u>          </u>
R	<u>4000 <del>lb</del></u>	<u>          </u>	<u>          </u>
X	<u>600 lb</u>	<u>          </u>	<u>          </u>

COMMENTS:

TABLE I. - Concluded.

[illegible]

TABLE II

TEST: 11-747				DATA SET, RUN NUMBER COLLATION SUMMARY										DATE: Nov 19-27, 1973				
QA53A																		
DATA SET IDENTIFIER	CONFIGURATION	SCHD.		PARAMETERS/VALUES				RM/L	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE)									
		$\alpha$	$\beta$	$\delta_{12}$	$\delta_{1F}$	$\delta_{2F}$	$\delta_R$		0.6	0.8	0.9	1.05	1.2					
BCMF-W <sub>1</sub> V		B	0	0	0	22.5	25	0										
REJ002				-10	-11.7			NOM	114	113	112	110	109					
03				115					114	163	162	161	160					
04				5-5					119	118	117	116	115					
05				-5					159	158	157	156	155					
06				-15					108	107	106	105	104					
07				0.15				HI	294	293	292	291	290					
08				15	16.3			NOM	295	296	297	298	299					
09								LO	304	303	302	301	300					
10				0				NOM	309	308	307	306	305					
11					-11.7				139	138	137	136	135					
12				0					154	149	148	143	140					
13				10					153	150	147	144	141					
14				20					152	151	146	145	142					
15				B	0		0	LO	324	319	318	313	312					
16								NOM	323	320	317	314	311					
17								HI	322	321	316	315	310					
18					-20	-11.7		LO	339	334	333	328	327					

1

7

13

19

25

31

37

43

49

55

61

67

73

76

NOTE: FOR COEFFICIENTS RECORDED SEE DATASETS IN APPENDIX VOL II

COEFFICIENTS

$\alpha$  OR  $\beta$

SCHEDULES

$\alpha(B) = -1.25$

$\beta(B) = -5.3$

$0.15$

$-1.0$

$1.35$

$7.9$

10VAR (1)

10VAR (2)

NDV

21.5

18.5

24.5

28.3

0

NOTE: FOR COEFFICIENTS RECORDED SEE DATASETS IN APPENDIX VOL II

$\alpha$  OR  $\beta$  SCHEDULES  $\alpha(B) = -1.25, 0, 1.5, 3.5, 5.5, 7.5, 9.5, 12.5, 15.5, 18.5, 21.5, 24.5, 28.3, 0$

COEFFICIENTS  $\beta(B) = -5, -3, -1, 0, 1, 3, 5, 7, 9$

BCMF-W<sub>1</sub>V = B<sub>20</sub>C<sub>1</sub>M<sub>7</sub>W<sub>16</sub>V<sub>9</sub>R<sub>5</sub>E<sub>26</sub>N<sub>28</sub>

BCMF-W<sub>2</sub>V = B<sub>20</sub>C<sub>1</sub>M<sub>7</sub>W<sub>21</sub>V<sub>9</sub>R<sub>5</sub>E<sub>26</sub>N<sub>28</sub>

TABLE II - Continued.

TEST: 11-747		QA53A		DATA SET RUN NUMBER COLLATION SUMMARY												DATE: NOV 19-27 1973																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
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		$\alpha$	$\beta$	$\delta_{BR}$	$\delta_{BF}$	$\delta_{SD}$	$\delta_{SR}$	0.6		0.8	0.9	1.05	1.2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
19	BCMF <sub>W1</sub> V	B	0	-20	-11.7	25	0		NOM	338	335	332	329	326																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														</



TABLE II - Continued.

TEST: 11-747

DATA SET RUN NUMBER COLLATION SUMMARY

DATE: NOV 19-27, 1973

DATA SET IDENTIFIER

CONFIGURATION

37

BCMFN, V

38

39

40

41

43

46

47

48

49

SEALED SG

50

SEALED SG

51

52

53

SCHD.

PARAMETERS/VALUES

α

B

20

B

0

-11.7

55

-10

NOM

B

0

85

0

0

B

10

20

↓

B

0

15

25

↓

0

B

0

85

-10

10

20

↓

B

0

15

16.3

25

0

B

0

0

16.3

25

0

0

B

0

-11.7

55

-25

10

20

↓

WACH NUMBERS FOR ALTERNATE INDEPENDENT VARIABLE

0.6

0.8

0.9

1.05

1.2

279

276

273

270

267

201

197

193

189

185

202

198

194

190

186

203

199

195

191

187

204

200

196

192

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289

288

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221

234

231

228

225

222

7

13

19

25

31

37

43

49

55

61

67

73

COEFFICIENTS

10, 26, 41

5, 16, 32

α OF β

SCHEDULES

TABLE II - Concluded.

TEST: 11-747 4A53A

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE: NOV 19-27, 1973

DATA SET IDENTIFIER	CONFIGURATION	SCHD.		PARAMETERS/VALUES						RN/L	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE)					
		$\alpha$	$\beta$	L	S	F	S	R	0.6		0.8	0.9	1.05	1.2		
55	BUMFW, V	0	0	0	-11.7	55	0	NOM	352	349	347					
56		10								350						
57		20							353	351	348					
58		0				25	-25		354	356	354					
59		10								357						
60		20							360	358	355					
61		0				85	0		345	340	343					
62		10								341						
63		20							346	342	344					

1	7	13	19	25	31	37	43	49	55	61	67	73	79
COEFFICIENTS													
$\alpha$ OR $\beta$													
SCHEDULES													
ID/JAR (1) ID/JAR (2) NOV													

TEST RUN NUMBERS

TABLE III. - MODEL DIMENSIONAL DATA

MODEL COMPONENT : BODY - B26GENERAL DESCRIPTION : Orbiter fuselage configuration 140A/BNOTE: B26 identical to B24 except underside of fuselage refaired to accept W116.MODEL SCALE: 0.030DRAWING NUMBER : VL70-000139, VL70-000140A, VL70-000140B, VL70-000143A, VL70-000145

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length (Body Fwd Sta $X_0=235$ ) - In.	<u>1293.3</u>	<u>38.799 (OML)</u>
Max Width (@ $X_0 = 1520$ ) - In.	<u>262.0</u>	<u>7.860</u>
Max Depth (@ $X_0 = 1464$ ) - In.	<u>250.0</u>	<u>7.500</u>
Fineness Ratio	<u>0.26357</u>	<u>0.26357</u>
Area - Ft <sup>2</sup>	<u>          </u>	<u>          </u>
Max. Cross-Sectional	<u>340.88462</u>	<u>0.30679</u>
Planform	<u>          </u>	<u>          </u>
Wetted	<u>          </u>	<u>          </u>
Base	<u>          </u>	<u>          </u>

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT : CANOPY - C<sub>9</sub>

GENERAL DESCRIPTION : Configuration 140 A/B orbiter fuselage canopy

MODEL SCALE: 0.030

DRAWING NUMBER : VL70-000140A, VL70-000143A

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length ( $X_0 = 434.643$ to $578$ )-In.	<u>143.357</u>	<u>4.30071</u>
Max Width (@ $X_0 = 513.127$ )	<u>152.412</u>	<u>4.57236</u>
Max Depth (@ $X_0 = 485.0$ )	<u>25.000</u>	<u>0.75000</u>
Fineness Ratio	<u>                    </u>	<u>                    </u>
Area	<u>                    </u>	<u>                    </u>
Max. Cross-Sectional	<u>                    </u>	<u>                    </u>
Planform	<u>                    </u>	<u>                    </u>
Wetted	<u>                    </u>	<u>                    </u>
Base	<u>                    </u>	<u>                    </u>

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: ELEVON - E<sub>26</sub>

GENERAL DESCRIPTION: Configuration 140A/B Orbiter Elevons

Data for one side.

MODEL SCALE: 0.030

MODEL DRAWING SS-400148, RELEASE 6

DRAWING NUMBER: VL70-000200, VL70-006089, VL70-006092

<u>DIMENSIONS:</u>	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
Area - Ft <sup>2</sup>	<u>210.0</u>	<u>0.1890</u>
Span (equivalent) - In.	<u>349.2</u>	<u>10.476</u>
Inb'd equivalent chord - In.	<u>118.004</u>	<u>3.540</u>
Outb'd equivalent chord - In.	<u>55.192</u>	<u>1.656</u>
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	<u>0.2096</u>	<u>0.2096</u>
At Outb'd equiv. chord	<u>0.4004</u>	<u>0.4004</u>
Sweep Back Angles, degrees		
Leading Edge	<u>0.00</u>	<u>0.00</u>
Tailing Edge	<u>- 10.056</u>	<u>- 10.056</u>
Hingeline	<u>0.00</u>	<u>0.00</u>
Area Moment (Normal to hinge line) Ft <sup>3</sup>	<u>1587.25</u>	<u>0.005670</u>
Mean Aerodynamic Chord - In.	<u>90.70</u>	<u>2.721</u>

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT : OMS PODS - M<sub>7</sub>

GENERAL DESCRIPTION : Configuration 140 A/B OMS Pods

MODEL SCALE: 0.030

DRAWING NUMBER : VL70-000140A, VL70-000145

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length (OMS Fwd Sta. $X_0=1233.0(\text{In.})$ )	<u>327.000</u>	<u>9.810</u>
Max Width (@ $X_0 = 1450.0$ ) - In.	<u>94.5</u>	<u>2.8350</u>
Max Depth (@ $X_0 = 1493.0$ ) - In.	<u>109.000</u>	<u>3.270</u>
Fineness Ratio	<u>                    </u>	<u>                    </u>
Area	<u>                    </u>	<u>                    </u>
Max. Cross-Sectional	<u>                    </u>	<u>                    </u>
Planform	<u>                    </u>	<u>                    </u>
Wetted	<u>                    </u>	<u>                    </u>
Base	<u>                    </u>	<u>                    </u>

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT : BODY FLAP - F<sub>9</sub>

GENERAL DESCRIPTION : Configuration 140 A/B body flap

MODEL SCALE: 0.030

DRAWING NUMBER : VL70-000140B, VL70-000200

DIMENSIONS	FULL SCALE	MODEL SCALE
Length - In.	<u>84.7</u>	<u>2.541</u>
Max Width - In.	<u>262.308</u>	<u>7.86924</u>
Max Depth - In.	<u>24.000</u>	<u>0.69000</u>
Fineness Ratio	<u></u>	<u></u>
Area - Ft <sup>2</sup>	<u></u>	<u></u>
Max. Cross-Sectional	<u></u>	<u></u>
Planform	<u>158.85350</u>	<u>0.14297</u>
Wetted	<u></u>	<u></u>
Base	<u>11.80642</u>	<u>0.03771</u>

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: NOZZLES - N<sub>28</sub>

GENERAL DESCRIPTION: Configuration 140 A/B OMS

MODEL SCALE: 0.030

DRAWING NO.: VL70-000140A

DIMENSIONS:	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Gimbal Origin		
Fuselage Sta. - In.		
X	<u>1518</u>	<u>45.54</u>
Y	<u>+ 88.0</u>	<u>2.64</u>
Z	<u>492.0</u>	<u>14.76</u>
Null Position		
Pitch	<u>15°49'</u>	<u>15°49'</u>
Yaw	<u>12°17'</u>	<u>12°17'</u>
Gimbal Range		
Pitch		
Outboard	<u>+ 9°</u>	<u>+ 8°</u>
Yaw		
Outboard	<u>13°17'</u>	<u>13°17'</u>
Inboard	<u>2°30'</u>	<u>2°30'</u>



TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: RUDDER - R<sub>5</sub>GENERAL DESCRIPTION: 140 A/B configuration per Rockwell LinesVL70-000095.MODEL SCALE: 0.030DRAWING NUMBER:VL70-000095, VL70-000146ADIMENSIONS:FULL-SCALEMODEL SCALEArea - Ft<sup>2</sup>106.380.09574

Span (equivalent) - In.

201.06.0300

Inb'd equivalent chord - In.

91.5852.74755

Outb'd equivalent chord - In.

50.8331.52499Ratio movable surface chord/  
total surface chord

At Inb'd equiv. chord

0.4000.400

At Outb'd equiv. chord

0.4000.400

Sweep Back Angles, degrees

Leading Edge

34.8334.83

Trailing Edge

26.2526.25

Hingeline

34.8334.83Area Moment (Normal to hinge line) Ft<sup>3</sup>526.130.01420

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: VERTICAL - V<sub>8</sub>

GENERAL DESCRIPTION: Configuration 140 A/B vertical tail.

NOTE: Similar to V5 with radius on T.E. upper corner and L.E. lower corner where vertical meets fuselage.

MODEL SCALE: 0.030

DRAWING NUMBER: VL70-000140A, VL70-000146A

DIMENSIONS:	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
TOTAL DATA		
Area (Theo) - Ft <sup>2</sup>		
Planform	413.253	0.37193
Span (Theo) - In.	315.720	9.46160
Aspect Ratio	1.675	1.675
Rate of Taper	0.507	0.507
Taper Ratio	0.40399	0.40399
Sweep-Back Angles - Degrees		
Leading Edge	45.00	45.00
Trailing Edge	25.947	25.947
0.25 Element Line	41.130	41.130
Chords:		
Root (Theo) WP	268.500	8.05500
Tip (Theo) WP	108.470	3.25410
MAC	199.80756	5.99423
Fus. Sta. of .25 MAC	1463.50	43.9050
W.P. of .25 MAC	635.522	19.06566
B.L. of .25 MAC		
Airfoil Section		
Leading Wedge Angle - Deg.	10.00	10.00
Trailing Wedge Angle - Deg.	14.920	14.920
Leading Edge Radius (Min.) - In.	2.00	0.060
Void Area	13.17	0.01185
Blanketed Area	0.0	0.0

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

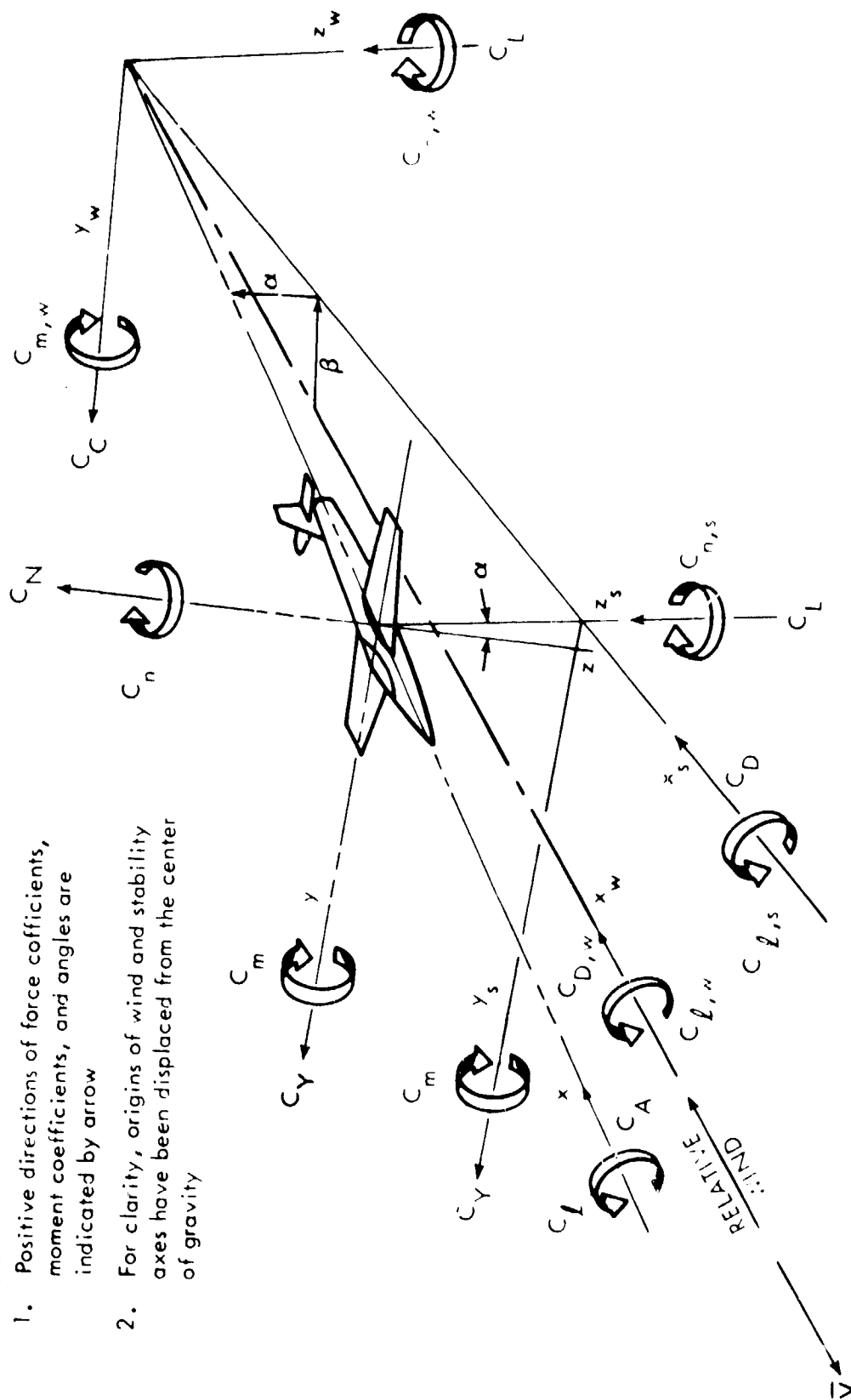
MODEL COMPONENT: <u>WING-W<sub>116</sub></u>		
GENERAL DESCRIPTION: <u>Configuration 140 A/B basic wing.</u>		
NOTE: <u>Identical to W114 except airfoil thickness. Dihedral angle is</u> <u>given for trailing edge of wing.</u>		
MODEL SCALE: <u>0.030</u>		
TEST NO.	DWG. NO.	VL70-000140B VL70-000200
DIMENSIONS:	FULL-SCALE	MODEL SCALE
TOTAL DATA		
Area (Theo.) - Ft <sup>2</sup>		
Planform	2690.00	2.4210
Span (Theo.) - In.	936.6816	28.10045
Aspect Ratio	2.265	2.265
Rate of Taper	1.177	1.177
Taper Ratio	0.200	0.200
Dihedral Angle, degrees	3.500	3.500
Incidence Angle, degrees	0.500	0.500
Aerodynamic Twist, degrees	+3.00	+3.000
Sweep Back Angles, degrees		
Leading Edge	45.00	45.00
Trailing Edge	10.056	10.056
0.25 Element Line	35.209	35.209
Chords:		
Root (Theo) B.P.O.O.	689.2429	20.67729
Tip, (Theo) B.P.	137.8486	4.13546
MAC	474.8117	14.24435
Fus. Sta. of .25 MAC	1126.721	33.80163
W.P. of .25 MAC	291.00	8.73000
B.L. of .25 MAC	187.33491	4.62005
EXPOSED DATA		
Area (Theo) - Ft <sup>2</sup>	1812.2205	1.63010
Span, (Theo) - In. BP108	736.6816	22.10045
Aspect Ratio	2.058	2.058
Taper Ratio	0.2451	0.2451
Chords		
Root BP108	570.6230	17.11869
Tip 1.00 $\frac{b}{2}$	137.8512	4.13554
MAC	354.2376	10.62713
Fus. Sta. of .25 MAC	1164.237	34.92711
W.P. of .25 MAC	292.00	8.76000
B.L. of .25 MAC	239.67786	7.19034
Airfoil Section (Rockwell Mod NASA)		
XXXX-64		
Root $\frac{b}{2}$ =	0.113	0.113
Tip $\frac{b}{2}$ =	0.12	0.12
Data for (1) of (2) Sides		
Leading Edge Cuff $\frac{2}{2}$		
Planform Area Ft <sup>2</sup>	79.13389	0.10650
Leading Edge Intersects Fus M. L. @ Sta	505.0	15.15000
Leading Edge Intersects Wing @ Sta	1084.5	30.10500

TABLE III. - MODEL DIMENSIONAL DATA - Concluded.

MODEL COMPONENT: <u>WING-W<sub>121</sub></u>		
GENERAL DESCRIPTION: <u>Identical to W<sub>121</sub> except for modified leading edge as shown on Figure 2c.</u>		
MODEL SCALE: <u>0.030</u>		
TEST NO.	DWG. NO. <u>VL70-000200, -006089,</u> <u>-000219, -006092</u>	
DIMENSIONS:	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
TOTAL DATA		
Area (Theo.) Ft <sup>2</sup>		
Planform	<u>2690.0</u>	<u>2.421</u>
Span (Theo) In.	<u>936.682</u>	<u>28.100</u>
Aspect Ratio	<u>2.265</u>	<u>2.265</u>
Rate of Taper	<u>1.177</u>	<u>1.177</u>
Taper Ratio	<u>0.200</u>	<u>0.200</u>
Dihedral Angle, degrees	<u>3.500</u>	<u>3.500</u>
Incidence Angle, degrees	<u>0.500</u>	<u>0.500</u>
Aerodynamic Twist, degrees	<u>+ 3.000</u>	<u>+ 3.000</u>
Sweep Back Angles, degrees		
Leading Edge	<u>45.000</u>	<u>45.000</u>
Trailing Edge	<u>10.056</u>	<u>10.056</u>
0.25 Element Line	<u>35.209</u>	<u>35.209</u>
Chords:		
Root (Theo) B.P.O.O.	<u>689.243</u>	<u>20.677</u>
Tip, (Theo) B.P.	<u>137.849</u>	<u>4.135</u>
MAC	<u>474.812</u>	<u>14.244</u>
Fus. Sta. of .25 MAC	<u>1126.721</u>	<u>33.802</u>
W.P. of .25 MAC	<u>291.00</u>	<u>8.730</u>
B.L. of .25 MAC	<u>187.335</u>	<u>5.620</u>
EXPOSED DATA		
Area (Theo) Ft <sup>2</sup>	<u>1812.221</u>	<u>1.631</u>
Span, (Theo) In. BP108	<u>736.682</u>	<u>22.100</u>
Aspect Ratio	<u>2.058</u>	<u>2.058</u>
Taper Ratio	<u>0.245</u>	<u>0.245</u>
Chords		
Root BP108	<u>570.623</u>	<u>1.631</u>
Tip 1.00 $\frac{b}{2}$	<u>137.851</u>	<u>4.136</u>
MAC	<u>354.238</u>	<u>10.627</u>
Fus. Sta. of .25 MAC	<u>1164.227</u>	<u>35.077</u>
W.P. of .25 MAC	<u>292.0</u>	<u>8.760</u>
B.L. of .25 MAC	<u>239.678</u>	<u>7.190</u>
Airfoil Section (Rockwell Mod NASA)		
XXXX-64		
Root $\frac{b}{2}$	<u>0.113</u>	<u>0.113</u>
Tip $\frac{b}{2}$	<u>0.12</u>	<u>0.12</u>
Data for (1) of (2) Sides		
Leading Edge Cuff		
Planform Area Ft <sup>2</sup>	<u>79.13389</u>	<u>0.0712</u>
Leading Edge Intersects Fus M. L. @ Sta	<u>505.0</u>	<u>15.150</u>
Leading Edge Intersects Wing @ Sta	<u>1084.5</u>	<u>32.535</u>

**Notes:**

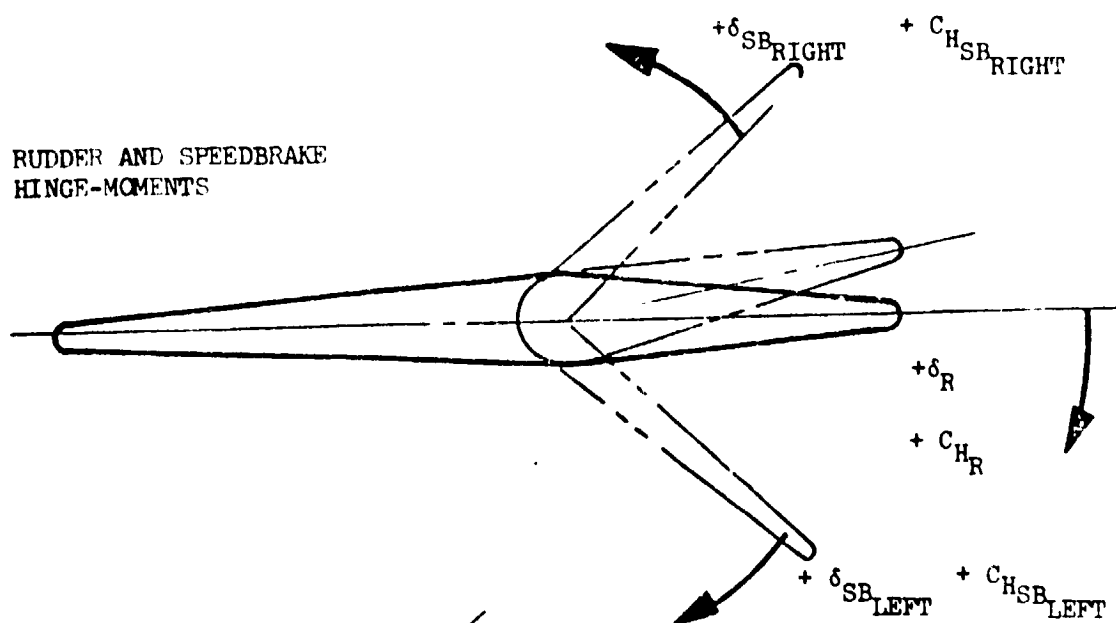
1. Positive directions of force coefficients, moment coefficients, and angles are indicated by arrow
2. For clarity, origins of wind and stability axes have been displaced from the center of gravity



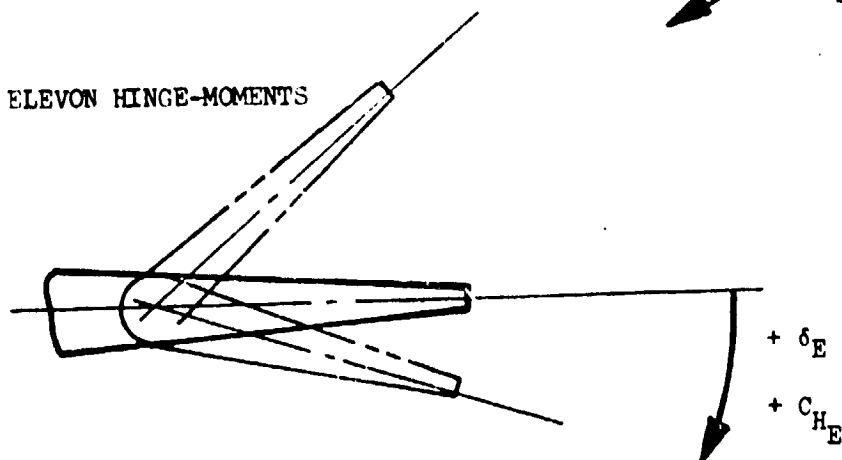
a. Body and stability axes

Figure 1. - Axis systems.

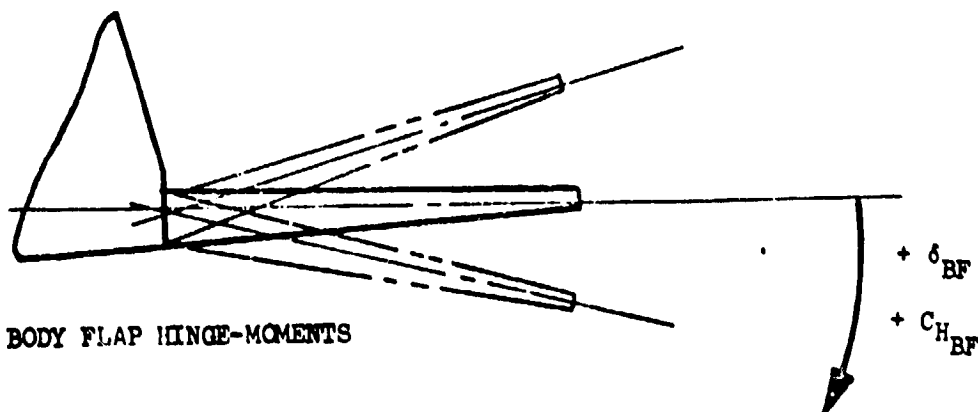
RUDDER AND SPEEDBRAKE  
HINGE-MOMENTS



ELEVON HINGE-MOMENTS

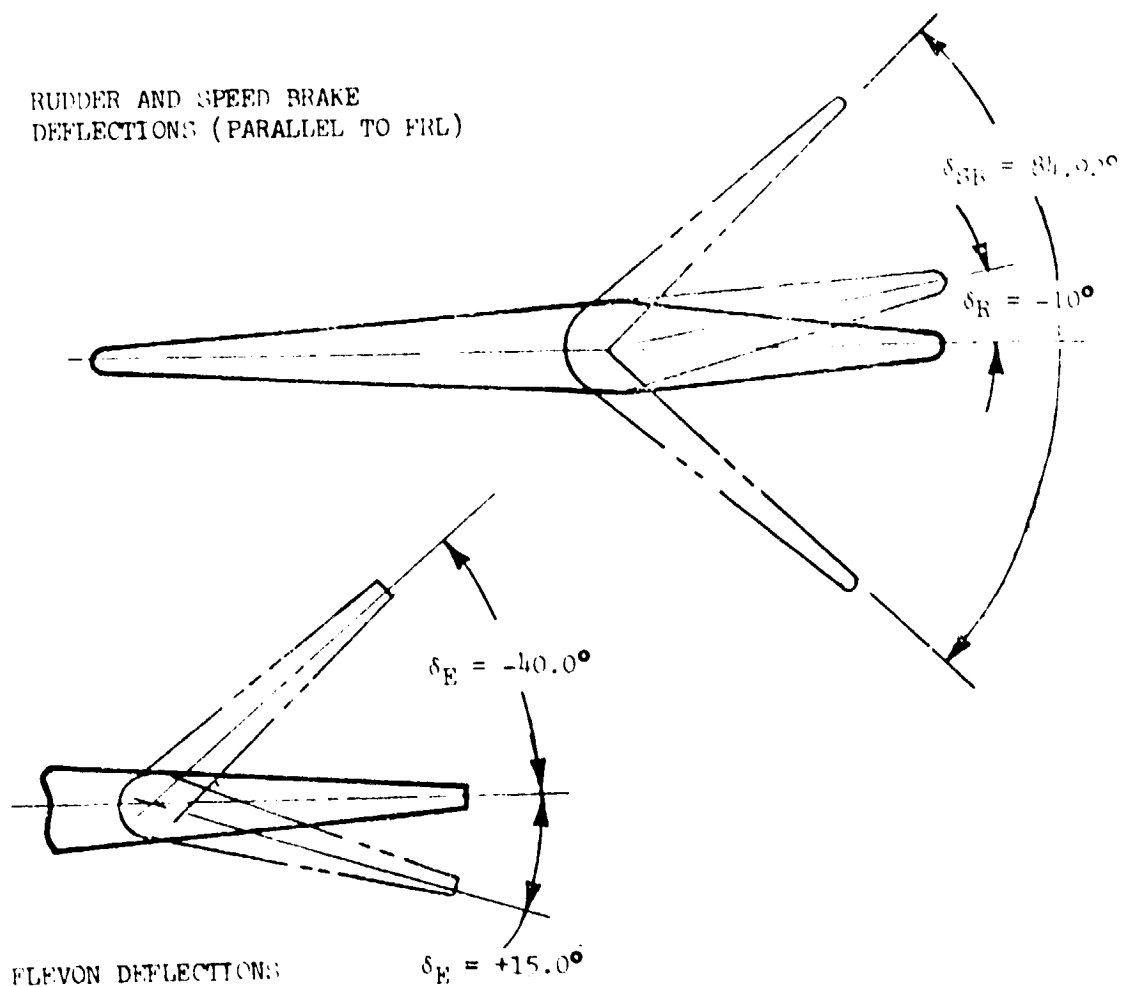


BODY FLAP HINGE-MOMENTS

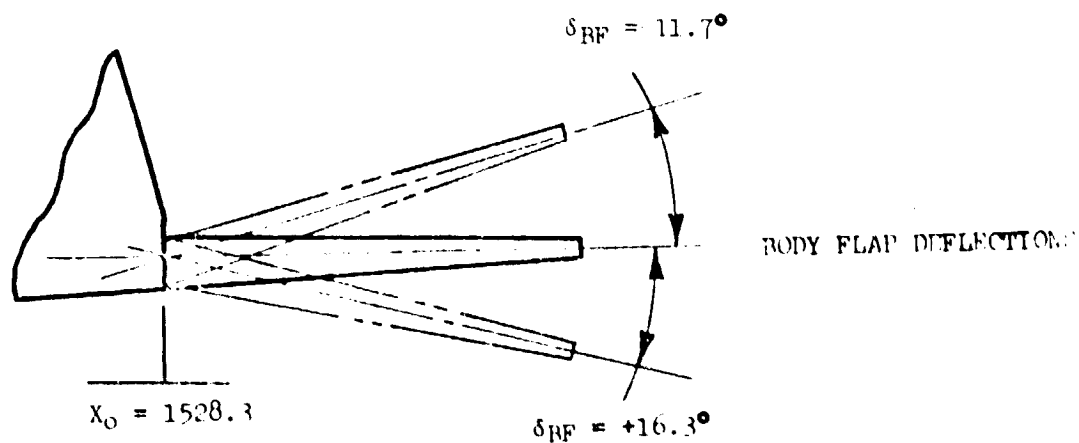


b. Definition of Hinge-Moment Directions  
Figure 1. - Continued

RUDDER AND SPEED BRAKE  
DEFLECTIONS (PARALLEL TO FRL)



ELEVON DEFLECTIONS



BODY FLAP DEFLECTIONS

c. Definition of Angular Measurements

Figure 1. - Concluded.

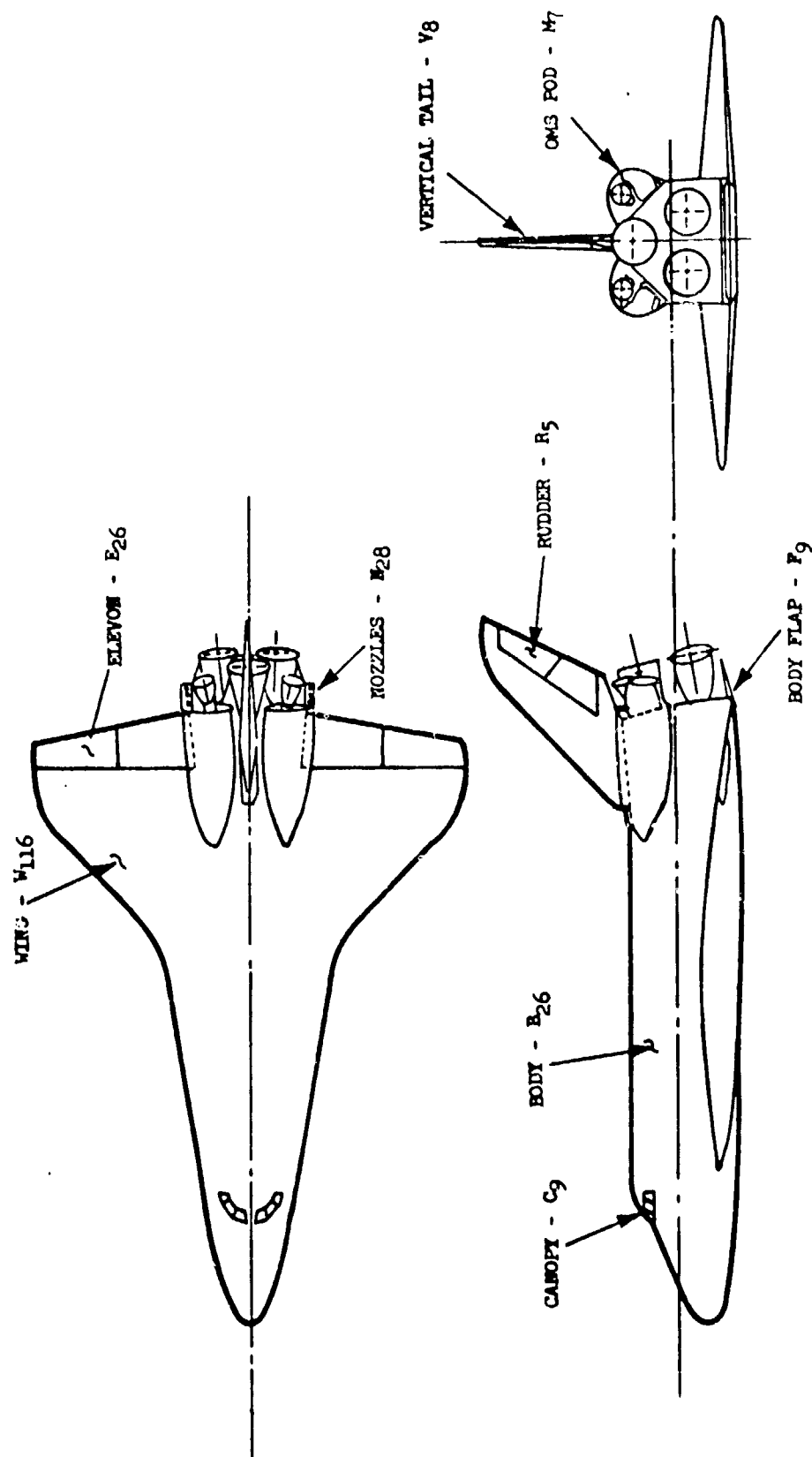


Figure 2. - Model sketches.  
a. Configuration 140 A/B



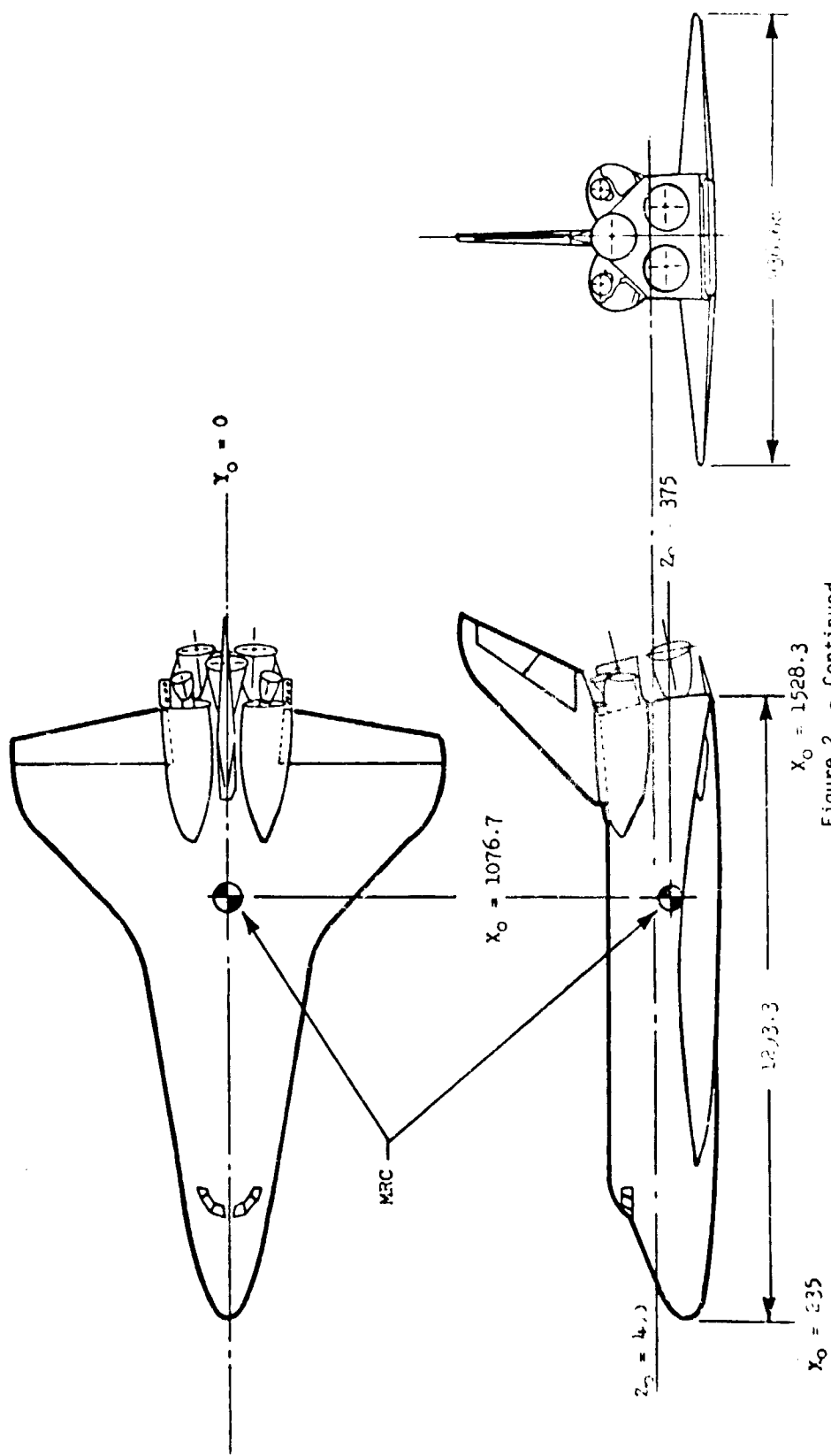


Figure 2. - Continued.

b. Dimensional Data

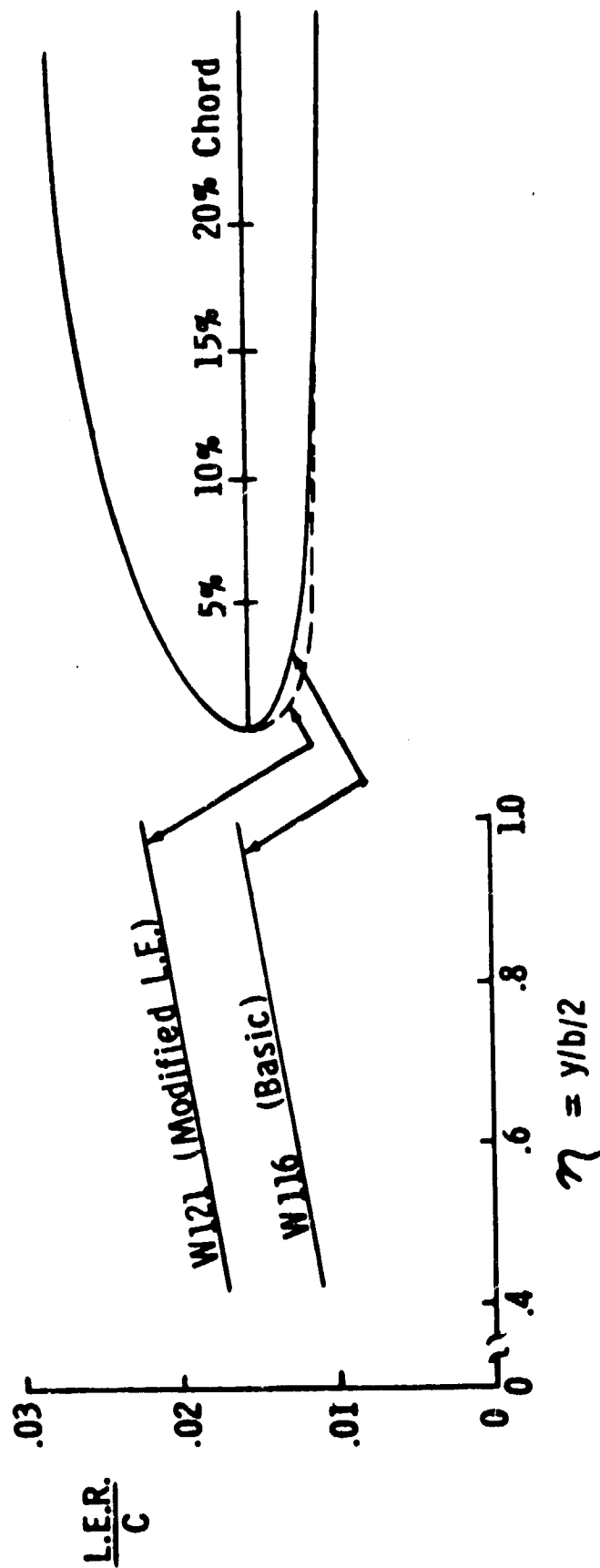
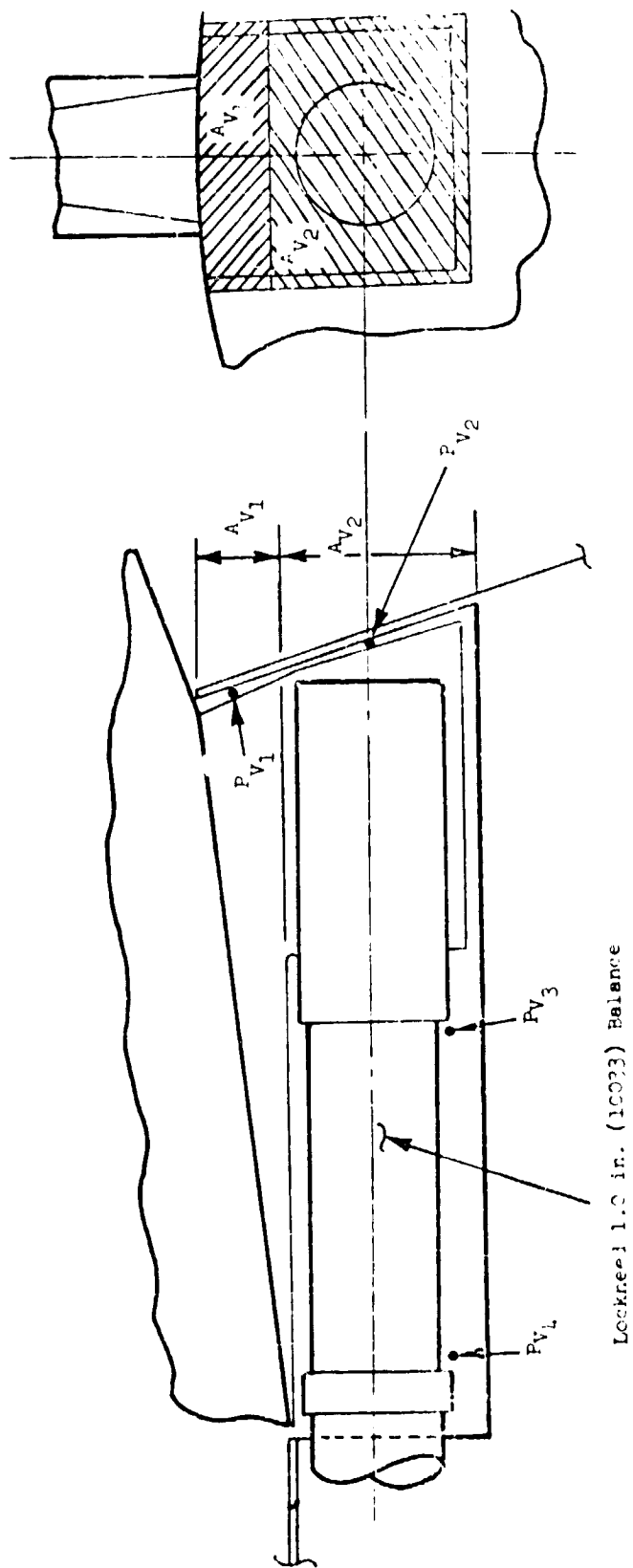


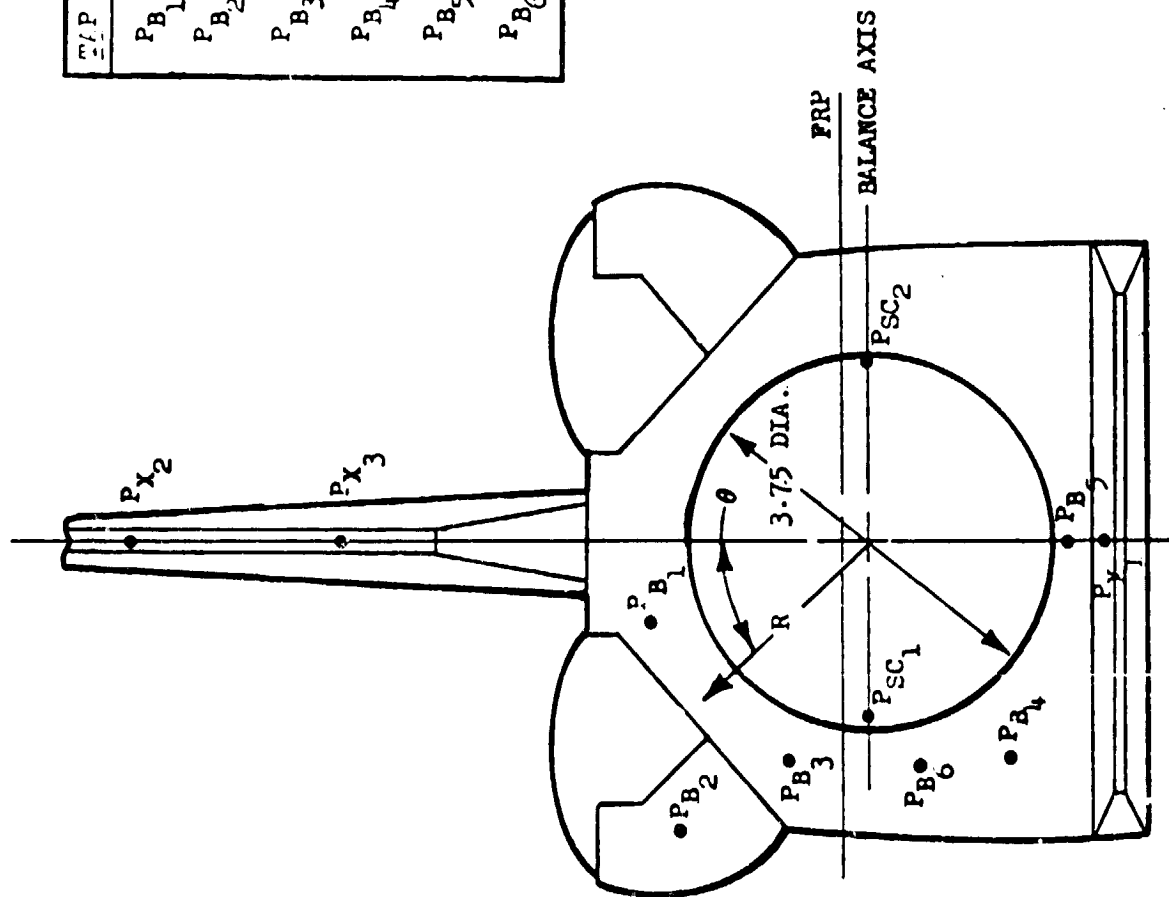
Figure 2. - Concluded.

c. Wing Leading-Edge Modifications



a. Vertical Balance Pressure Gauge Locations

Figure 3. - Pressure instrumentation.



$\theta$	$R$
$23^\circ$	2.85
$50^\circ$	CENTROID
$70^\circ$	2.80
$125^\circ$	3.30
$180^\circ$	2.30
$99^\circ$	2.85

b. Base Pressure Orifice Locations  
Figure 3. - Concluded.

DATA FIGURES

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (TEJC011)

SYMBOL	MACH	BETA	PARAMETRIC VALUES	REFERENCE INFORMATION
○	.598		ELEVON	SREF 2.4210
□	.797		DOFLAP	LREF 14.2440
◇	.905		RUDDER	BREF 28.1004
△	1.052		ELEV-R	XTRP 32.3010
	1.202		ELEV-L	YTRP .0000
				ZTRP 11.2500
				SCALE .0300

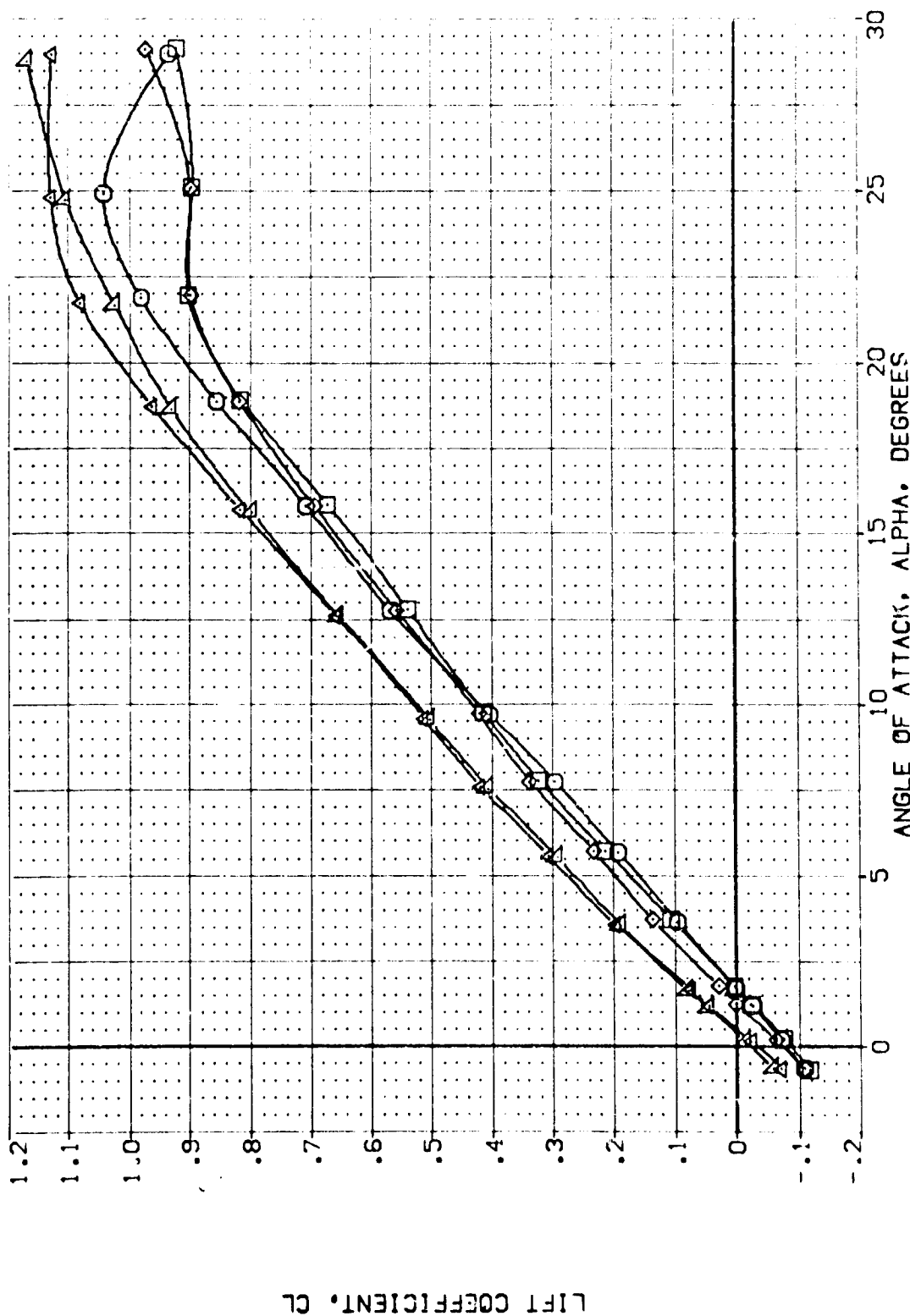


FIG. 4 LONGITUDINAL CHARACTERISTICS OF TOTAL VEHICLE

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (TEJ011)

SYMBOL  
 ▽  
 ◇  
 □  
 ○  
 △

MACH  
 .598  
 .797  
 .905  
 1.052  
 1.202

PARAMETRIC VALUES  
 BETA  
 AILRON  
 SPOBRK  
 ELEV-L  
 .000  
 .000  
 25.000  
 .000  
 ELEVON  
 BOFLAP  
 RUDDER  
 ELEV-R  
 .000  
 -11.700  
 .000  
 .000

REFERENCE INFORMATION  
 SREF  
 LREF  
 BRCF  
 XMRP  
 YMRP  
 ZMRP  
 SCALE  
 2.4210  
 11.2440  
 28.1004  
 32.3010  
 .0000  
 .0000  
 11.2500  
 .0300  
 SQ.FT.  
 IN.  
 IN.  
 IN.  
 IN.  
 IN.  
 IN.

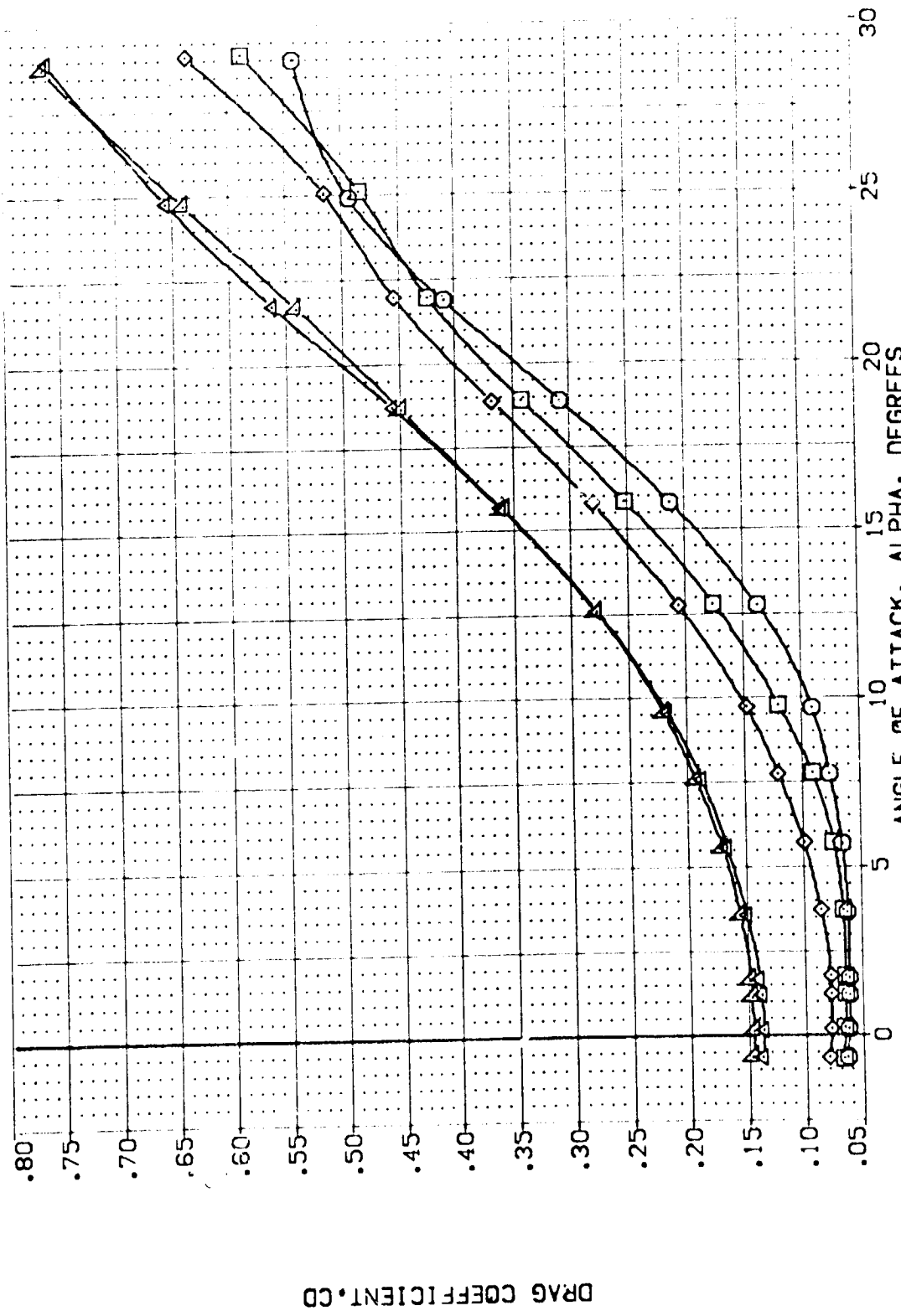


FIG. 4 LONGITUDINAL CHARACTERISTICS OF TOTAL VEHICLE





ARC 11-747 0A53A B C M F W1 V NOM. RN/L

(TEJO11)

SYMBOL  
 ○ □ ◇ △

MACH  
 .598  
 .797  
 .905  
 1.052  
 1.202

PARAMETRIC VALUES  
 .000  
 .000  
 .000  
 .000  
 .000

BETA  
 AILRON  
 SPOBRK  
 ELEV-L

ELEVON  
 BOFLAP  
 RUDDER  
 ELEV-R

REFERENCE INFORMATION  
 SREF 2.4210  
 LREF 14.2440  
 BREF 28.1004  
 XMRP 32.3010  
 YMRP .0000  
 ZMRP 11.2500  
 SCALE .0300

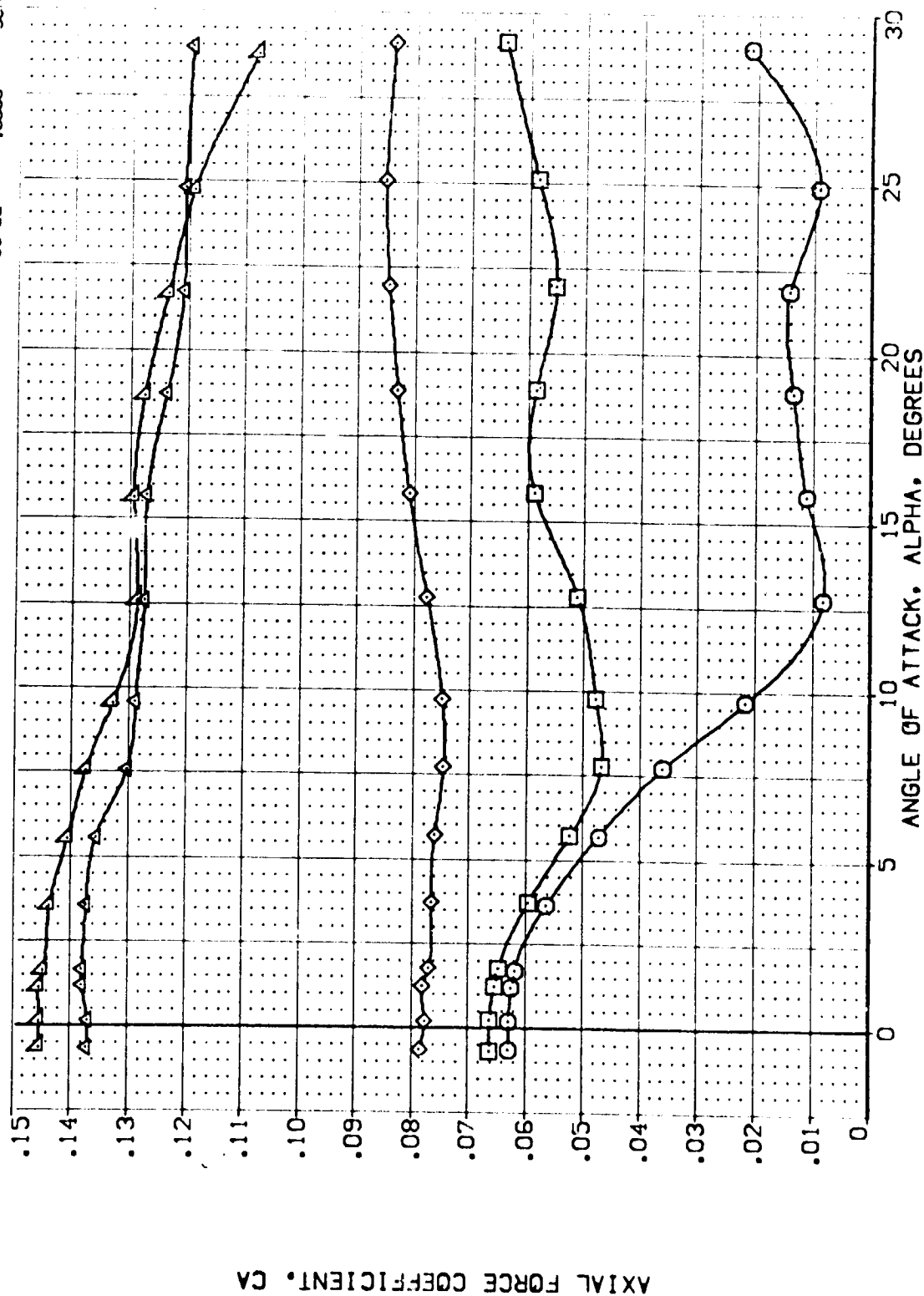


FIG. 4 LONGITUDINAL CHARACTERISTICS OF TOTAL VEHICLE

(TEJ011)

ARC 11-747 0A53A B C M F W1 V NOM. RN/L

REFERENCE INFORMATION  
 SREF 2.4210 SQ.FT.  
 LREF 14.2440 IN.  
 BREF 28.1004 IN.  
 YMRP 32.3010 IN.  
 ZMRP 11.2500 IN.  
 SCALE .0300

PARAMETRIC VALUES  
 BETA .000 ELEVON .000  
 AILRON .000 BOFLAP -11.700  
 SPOBRK 25.000 RUDDER .000  
 ELEV-L .000 ELEV-R .000

SYMBOL  
 △ □ ◇ △

MACH  
 .568  
 .797  
 .905  
 1.052  
 1.202

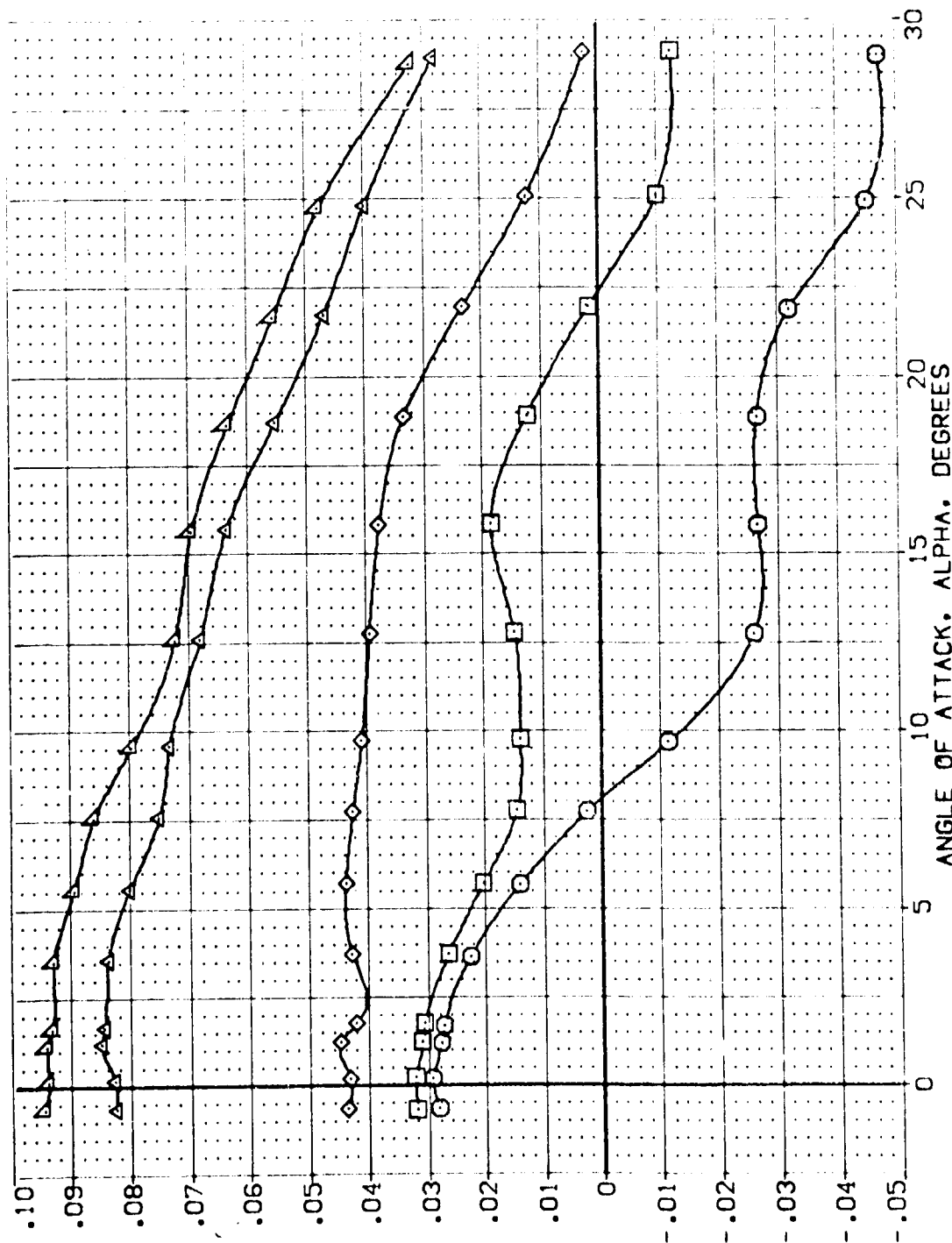


FIG. 4 LONGITUDINAL CHARACTERISTICS OF TOTAL VEHICLE

(TEJ011)

ARC 11-747 0A53A B C M F W1 V NOM. RN/L

SYMBOL  
 □ ◇ △ ▽

MACH  
 .588  
 .797  
 .905  
 1.052  
 1.202

PARAMETRIC VALUES  
 BETA .000 ELEVON .000  
 AILERON .000 BOFLAP -11.700  
 SPOBRK 25.000 RUDDER .000  
 ELEV-L .000 ELEV-R .000

REFERENCE INFORMATION  
 SREF 2.4210 SQ.FT.  
 LREF 14.2440 IN.  
 BREF 28.1004 IN.  
 XMRP 32.3010 IN.  
 YMRP .0000 IN.  
 ZMRP 11.2500 IN.  
 SCALE .0300

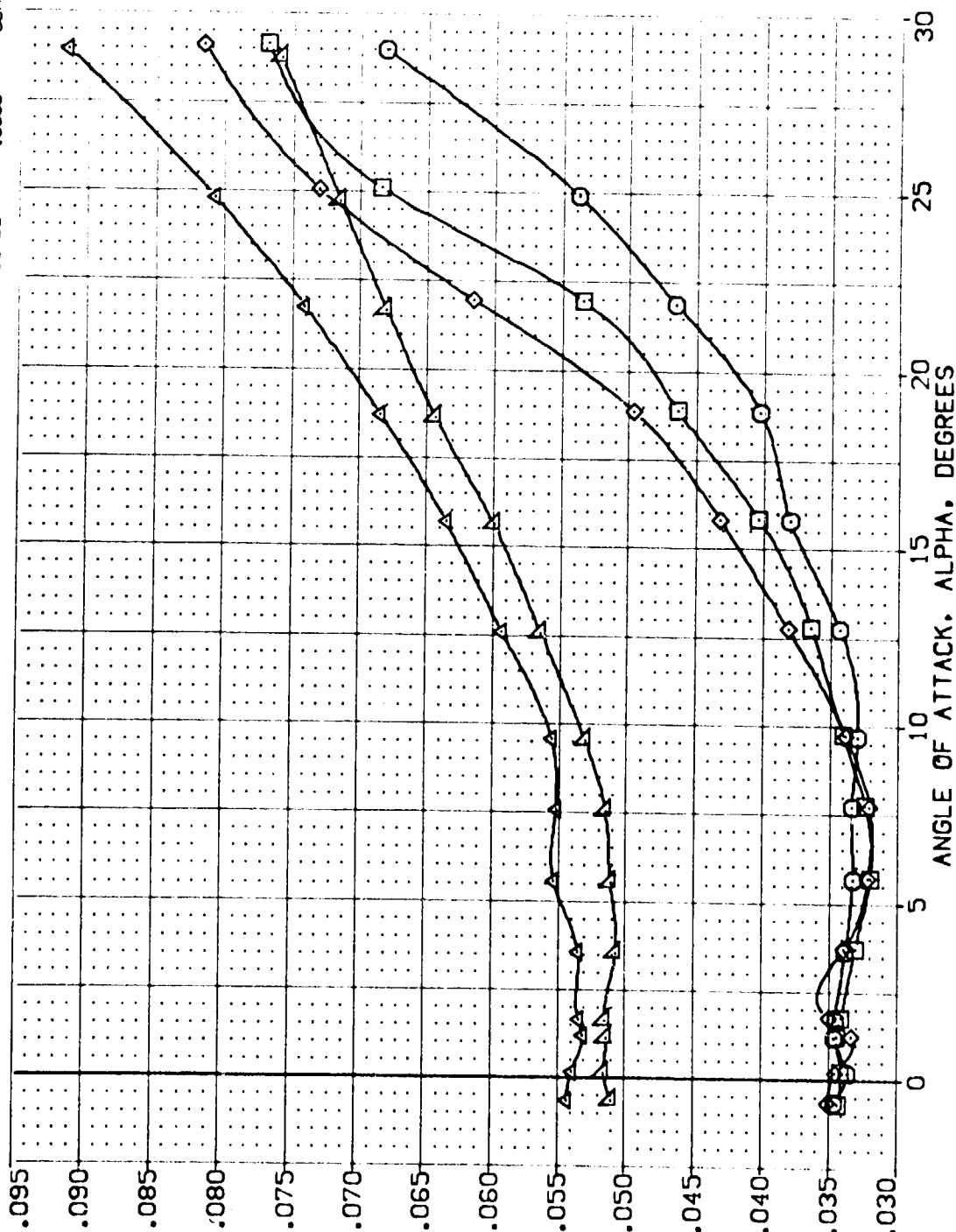


FIG. 4 LONGITUDINAL CHARACTERISTICS OF TOTAL VEHICLE

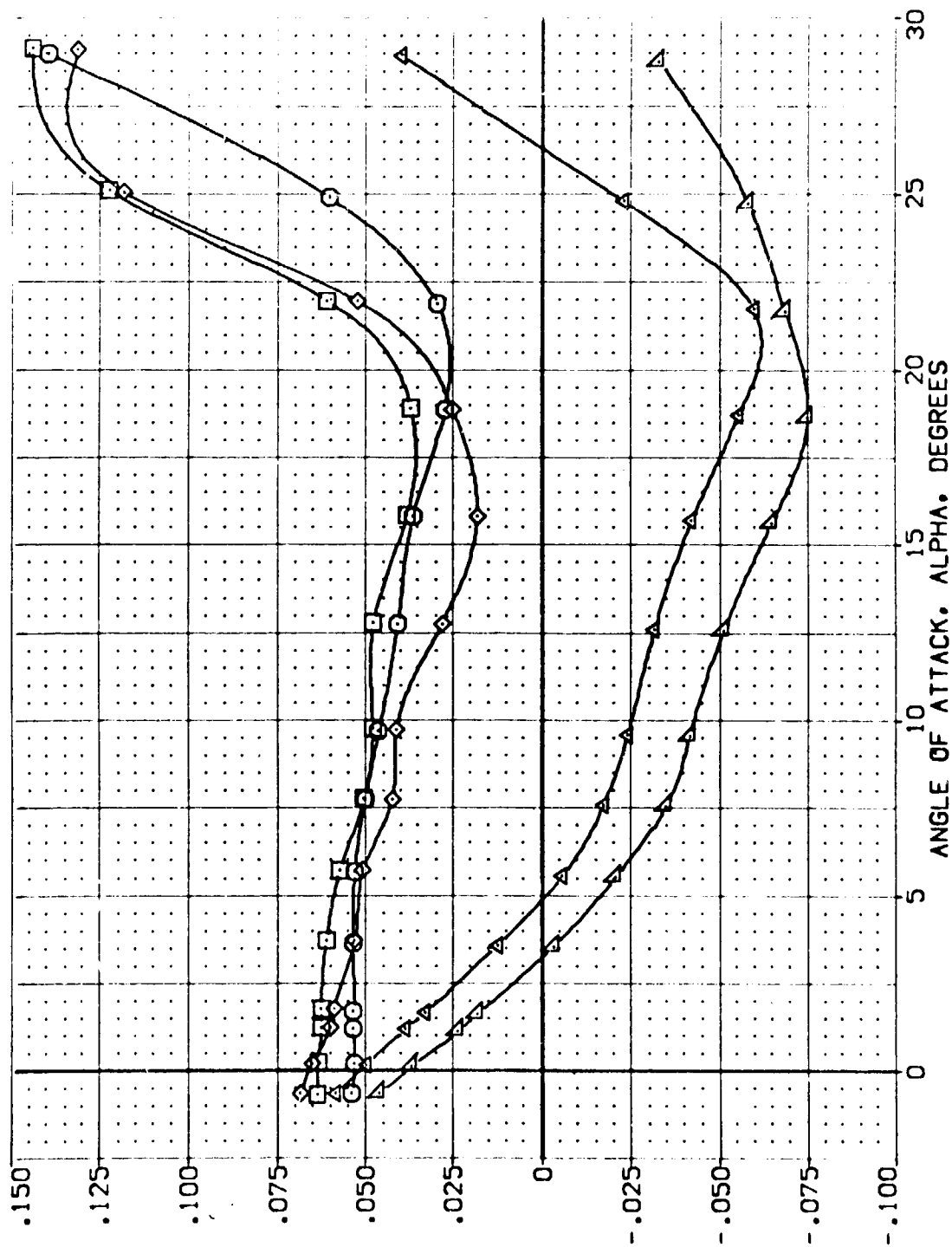


ARC 11-747 0A53A B C M F W1 V NOM. RN/L (TEJ011)

SYMBOL  
 ○ □ ◇ △

PARAMETRIC VALUES  
 BETA .000 ELEVON .000  
 AILERON .000 BOFLAP -11.700  
 SPOILER 25.000 RUDDER .000  
 ELEV-L .000 ELEV-R .000

REFERENCE INFORMATION  
 SREF 2.4210 SQ.FT.  
 LREF 14.2440 IN.  
 BREF 28.1004 IN.  
 XMRP 32.3010 IN.  
 YMRP .0000 IN.  
 ZMRP 11.2500 IN.  
 SCALE .0300



PITCHING MOMENT COEFFICIENT (FWD C.G.), CLMFW

FIG. 4 LONGITUDINAL CHARACTERISTICS OF TOTAL VEHICLE



ARC 11-747 0A53A B C M F W1 V NOM. RN/L (TEJ011)

SYMBOL  
 7  
 4  
 0  
 0  
 0  
 4

PARAMETRIC VALUES  
 MACH .598 BETA .000 ELEVON .000  
 .797 AILRON .000 BOFLAP -11.700  
 .905 SPOBRK 25.000 RUDDER .000  
 1.052 ELEV-L .000 ELEV-R .000  
 1.202

REFERENCE INFORMATION  
 SPREF 2.4210 SQ.FT.  
 LREF 14.2440  
 BRPF 26.1004  
 XMRP 32.3000  
 YMRP .0000  
 ZMRP 11.2500  
 SCALE .0300

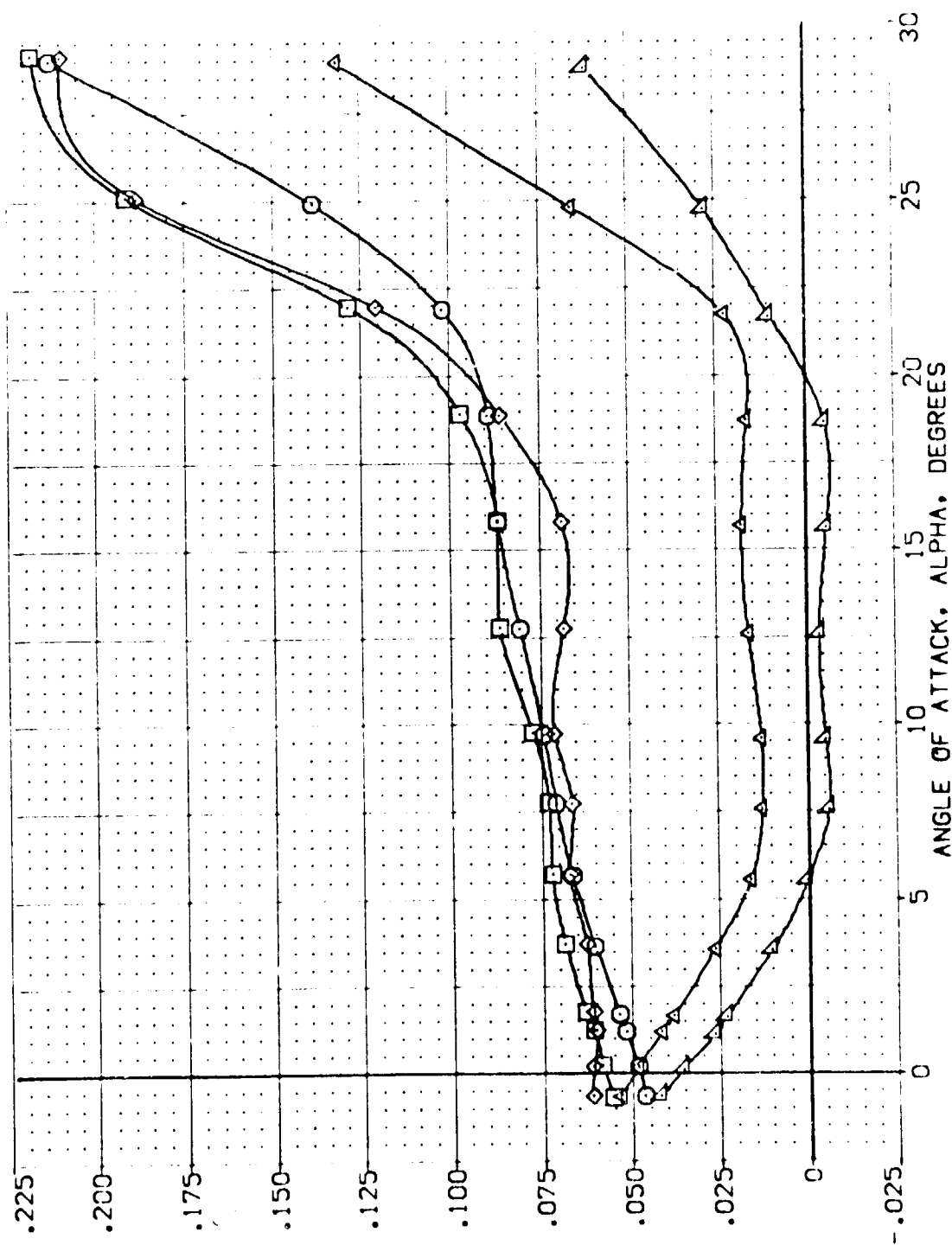


FIG. 4 LONGITUDINAL CHARACTERISTICS OF TOTAL VEHICLE

(TEJ011)

ARC 11-747 0A53A B C M F W1 V NOM. RN/L

SYMBOL  
 □  
 ◇  
 △

MACH  
 .588  
 .797  
 .905  
 1.052  
 1.202

BETA  
 .000  
 .000  
 7°.000  
 .000  
 .000

PARAMETRIC VALUES  
 ELEVON  
 90° LAP  
 RUDDER  
 ELEV-R

REFERENCE INFORMATION  
 SREF 2.4210 SC.FT.  
 LREF 14.2440 IN.  
 BREF 28.1004 IN.  
 XMRP 32.3010 IN.  
 YMRP .0000 IN.  
 ZMRP 11.7500 IN.  
 SCALE .0300

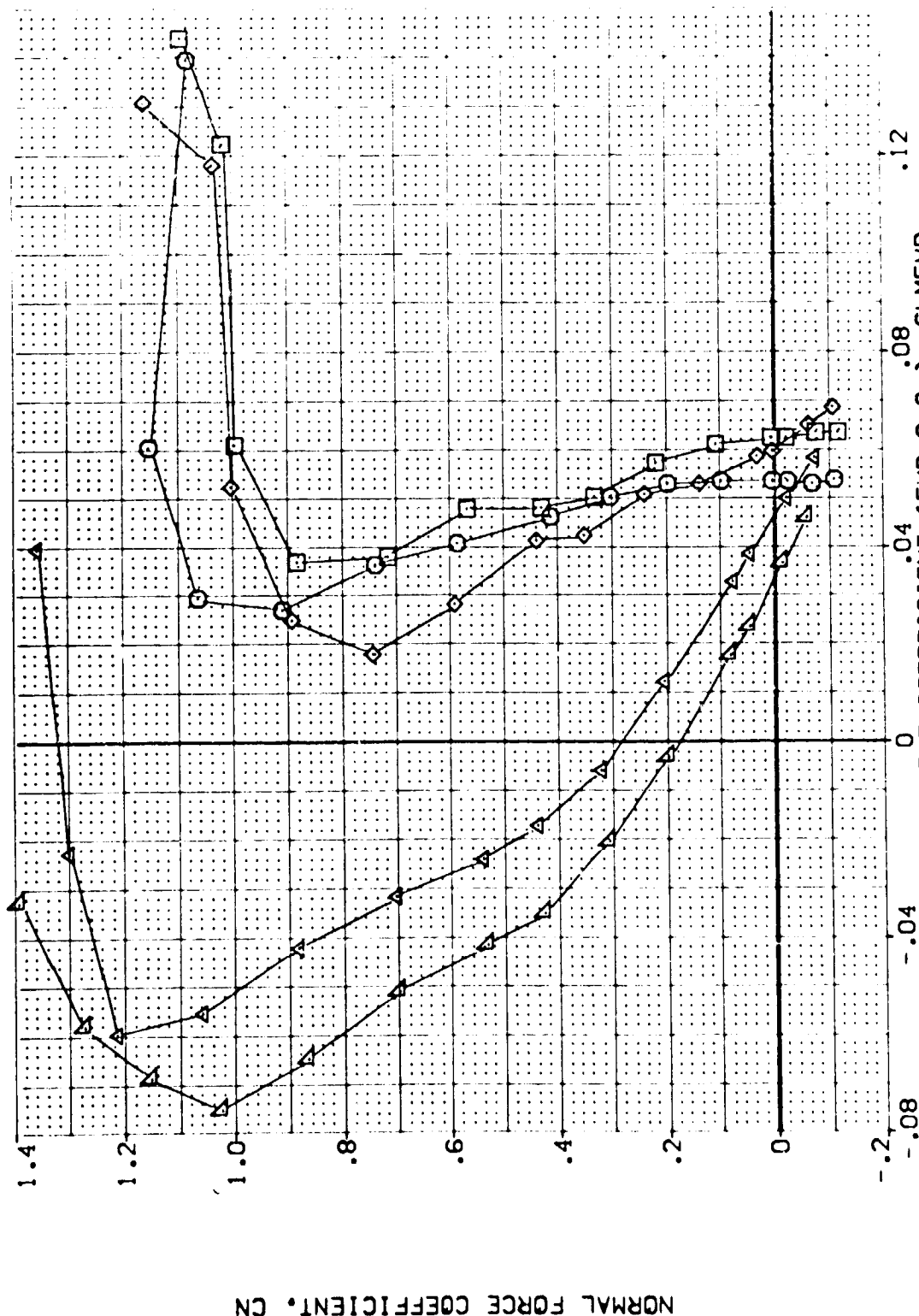


FIG. 4 LONGITUDINAL CHARACTERISTICS OF TOTAL VEHICLE

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (TEJ011)

SYMBOL	MACH	BETA	PARAMETRIC VALUES	REFERENCE INFORMATION
○	.588		ELEVON .000	SREF 2.4210
□	.797	AILRON	BOFLAP -11.700	LREF 14.2440
◇	.905	SPOBRK	RUDER .000	BREF 28.1004
△	1.052	ELEV-L	ELEV-R .000	XMRP 32.3010
▽	1.202			YMRP .0000
				ZMRP 11.2500
				SCALE .0300

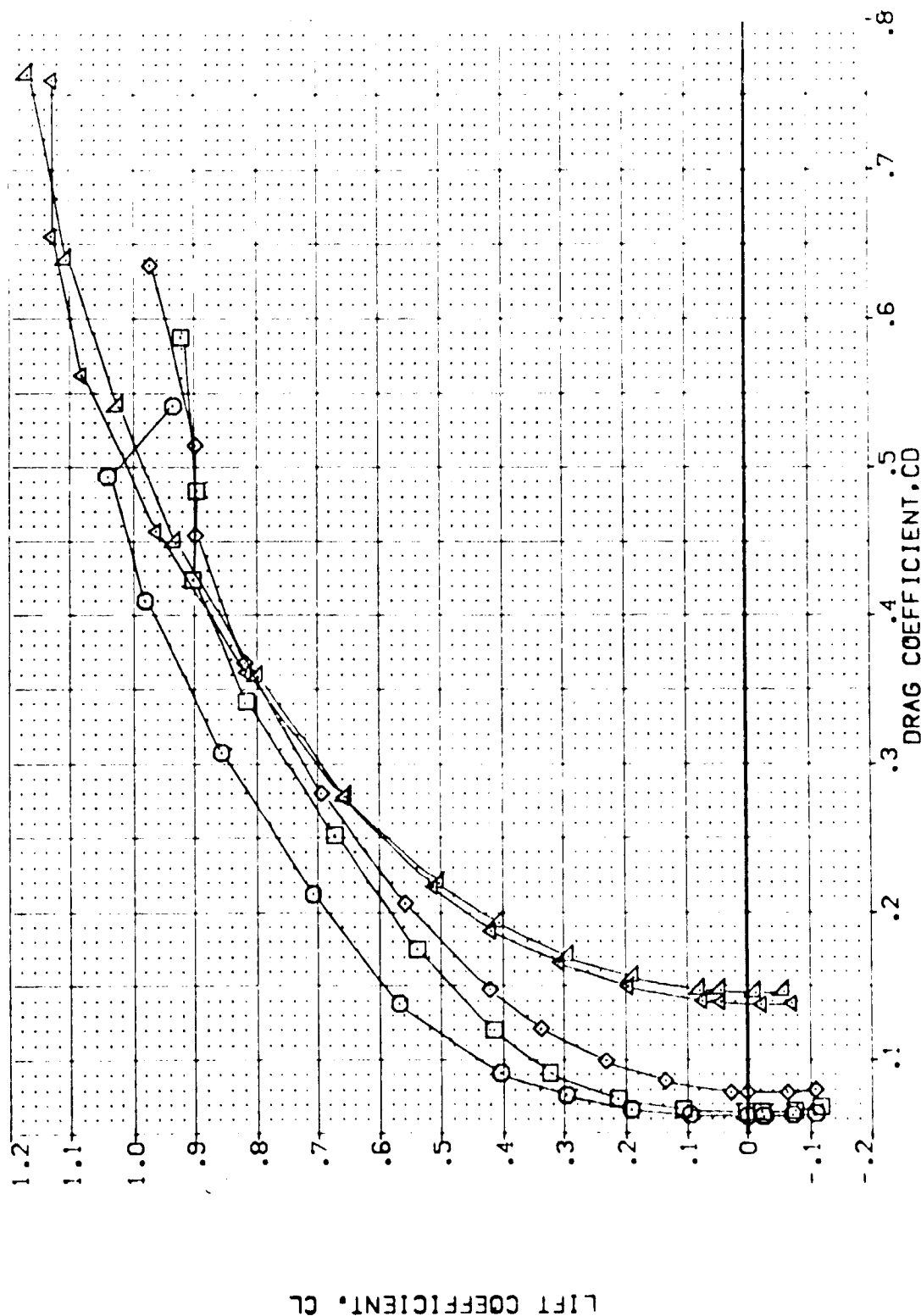


FIG. 4 LONGITUDINAL CHARACTERISTICS OF TOTAL VEHICLE



(TEJ011)

ARC 11-747 0A53A B C M F W1 V NOM. RN/L

SYMBOL  
 ○ □ ◇ △

MACH  
 .588  
 .797  
 .905  
 1.052  
 1.202

PARAMETRIC VALUES  
 BETA .000  
 AILRON .000  
 SPOBRK 25.000  
 ELEV-L .000

ELEVON .000  
 SDFLAP -11.700  
 RUDDER .000  
 ELEV-R .000

REFERENCE INFORMATION  
 SREF 2.4210 SQ.FT.  
 LREF 14.2440 IN.  
 BREF 28.1004 IN.  
 XMRP 32.3010 IN.  
 YMRP .0000 IN.  
 ZMRP 11.2500 IN.  
 SCALE .0300

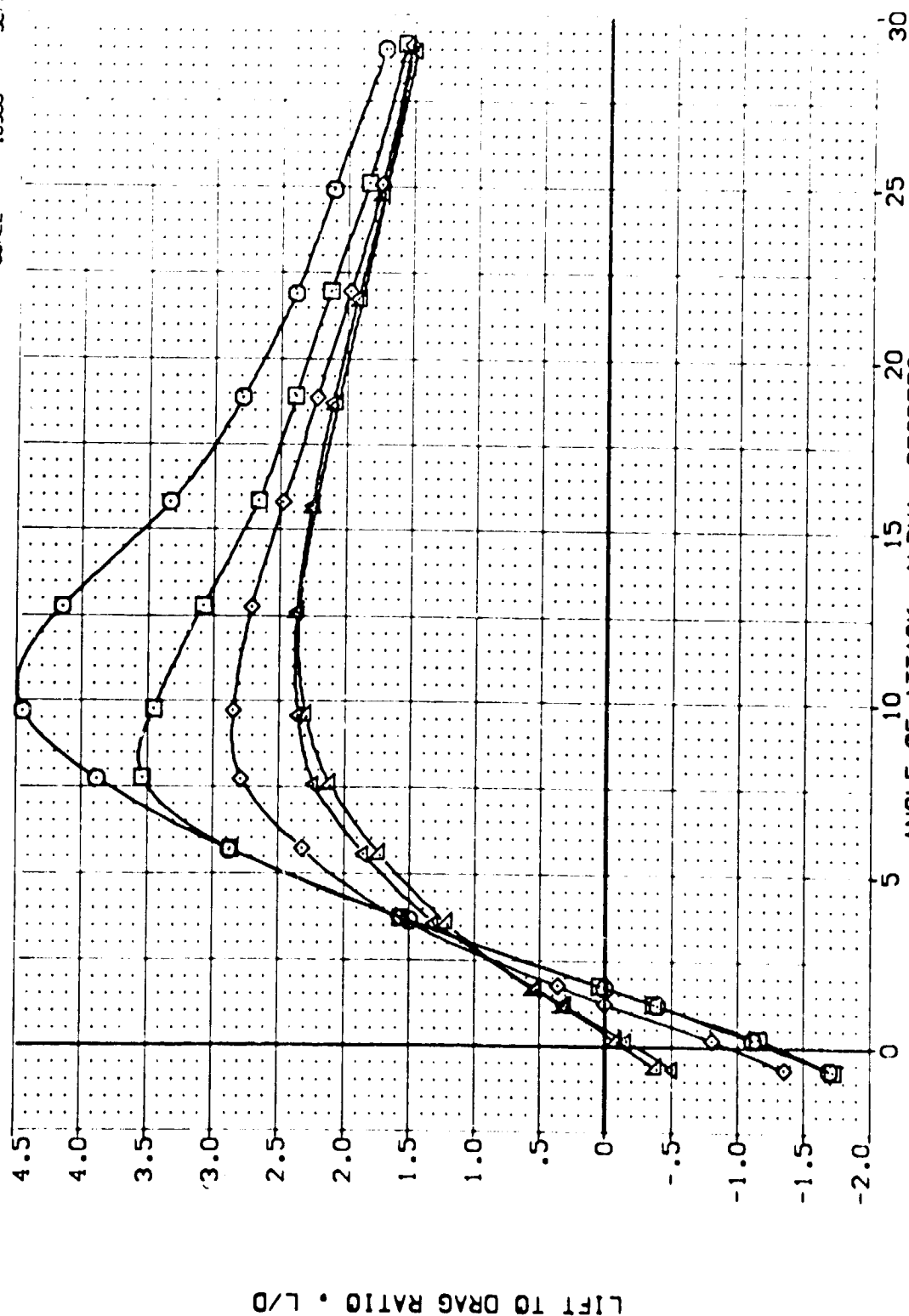


FIG. 4 LONGITUDINAL CHARACTERISTICS OF TOTAL VEHICLE

**[REDACTED]**

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RV/L	AIRLION	BOFLAP	SFOBRK	REFERENCE INFORMATION
[TEJR17]	ARC 11-747 OAS3A B C H F V	5.100	.000	.000	25.000	SREF 2.4210 SQ.FT.
[TEJR16]	ARC 11-747 OAS3A B C H F V	3.700	.000	.000	25.000	LREF 14.2440 IN.
[TEJR15]	ARC 11-747 OAS3A B C H F V	2.200	.000	.000	25.000	EREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

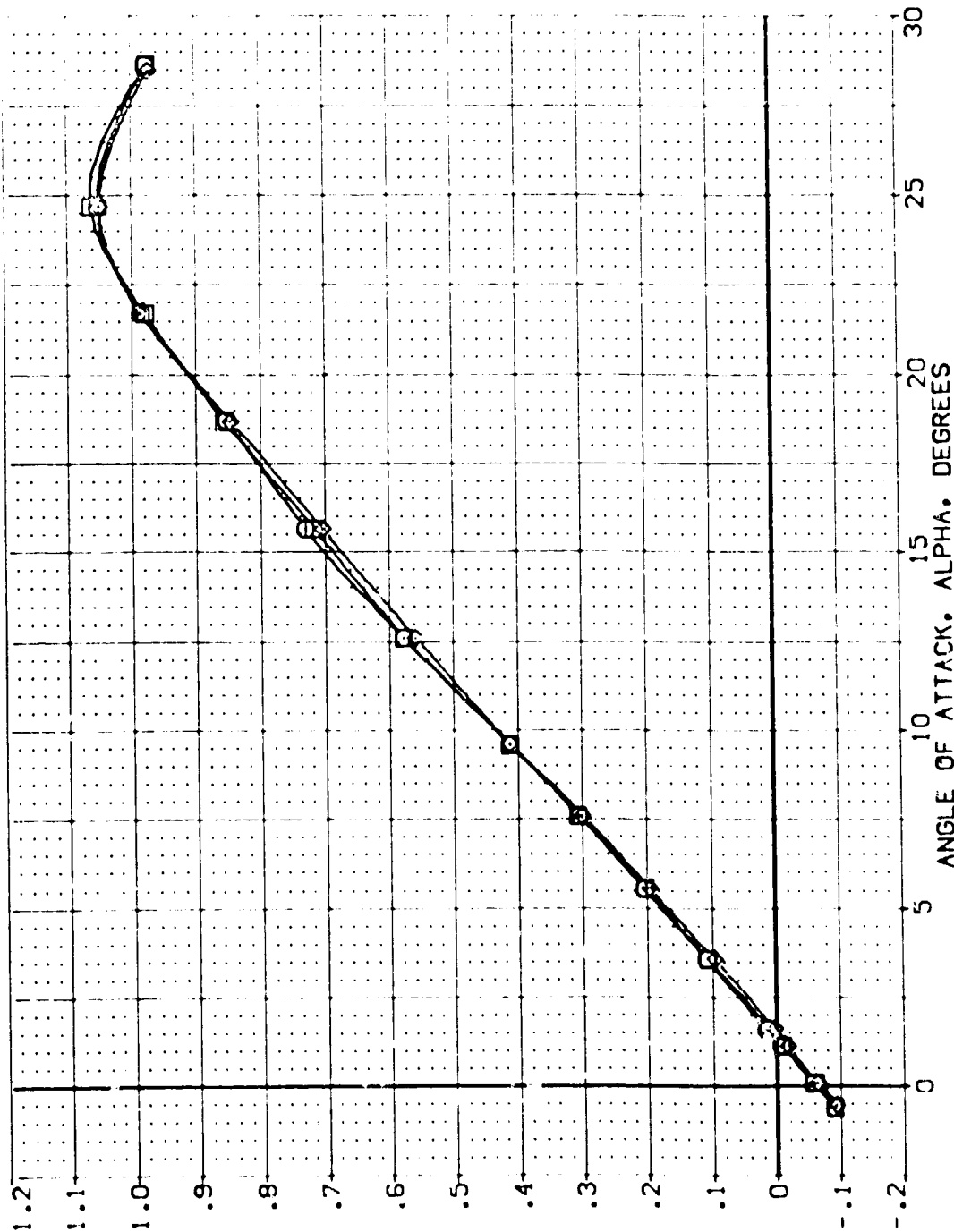


FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

(A)MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RV/L	1/LRON	BDFLAF	SPOBRK	REFERENCE INFORMATION
(TEJR17)	ARC 11-747 2A53A B C M F V	5.100	.000	.000	25.000	SREF 2.4210 SQ.FT.
(TEJR16)	ARC 11-747 2A53A B C M F V	3.700	.000	.000	25.000	LREF 14.2443 IN.
(TEJR15)	ARC 11-747 2A53A B C M F V	2.200	.000	.000	25.000	BREF 28.1004 IN.
						XMREF 32.3010 IN.
						YMREF .0000 IN.
						ZMREF 11.2500 IN.
						SCALE .0300

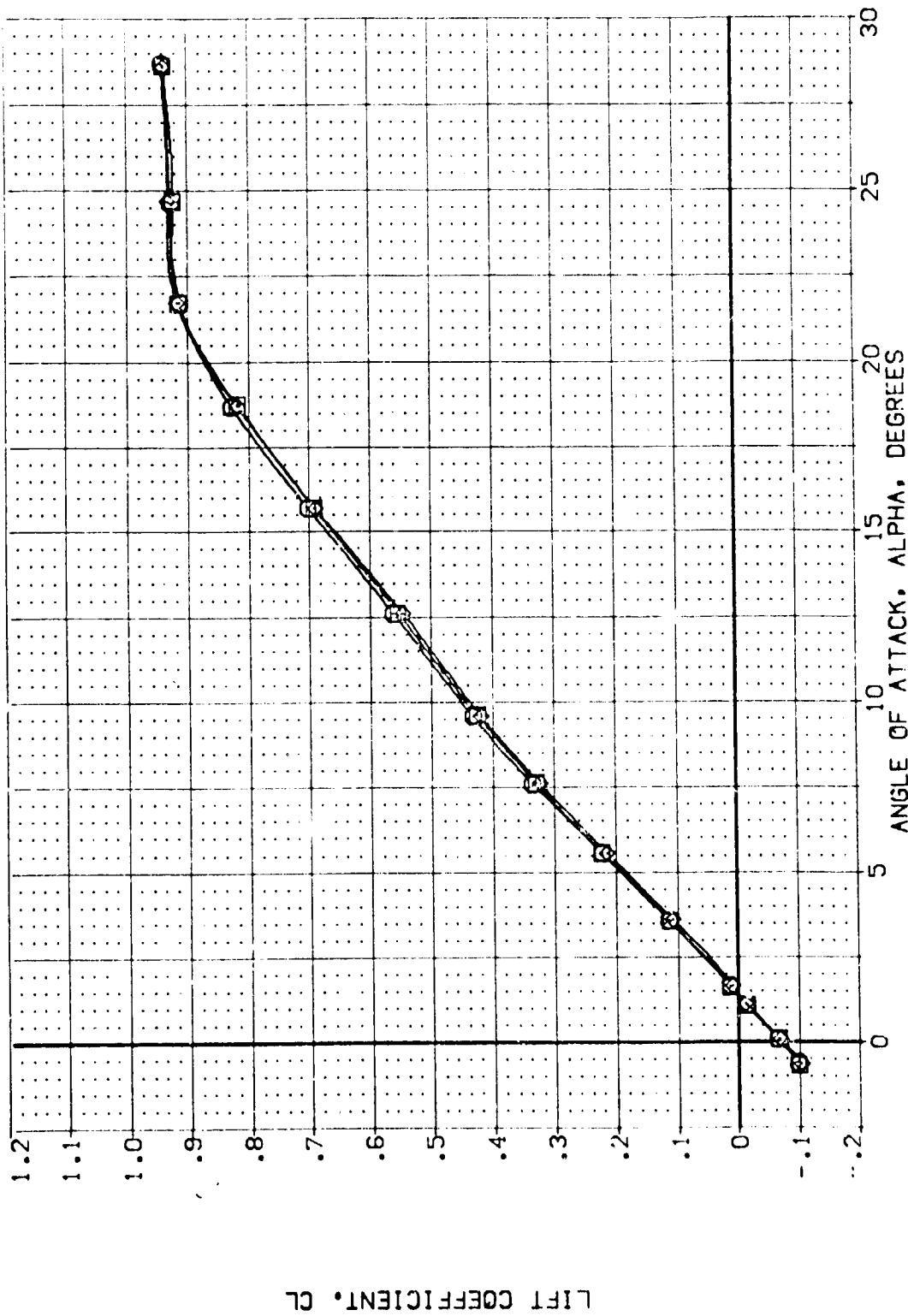


FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

(B)MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RV/L	AILRON	BOFLAP	SPOBRK	REFERENCE INFORMATION
(TEJR17)	ARC 11-747 OAS3A B C M F VI V	5.100	.000	.000	25.000	SREF 2.4210 SQ.FT.
(TEJR16)	ARC 11-747 OAS3A B C M F VI V	3.700	.000	.000	25.000	LREF 14.2440 IN.
(TEJR15)	ARC 11-747 OAS3A B C M F VI V	2.200	.000	.000	25.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

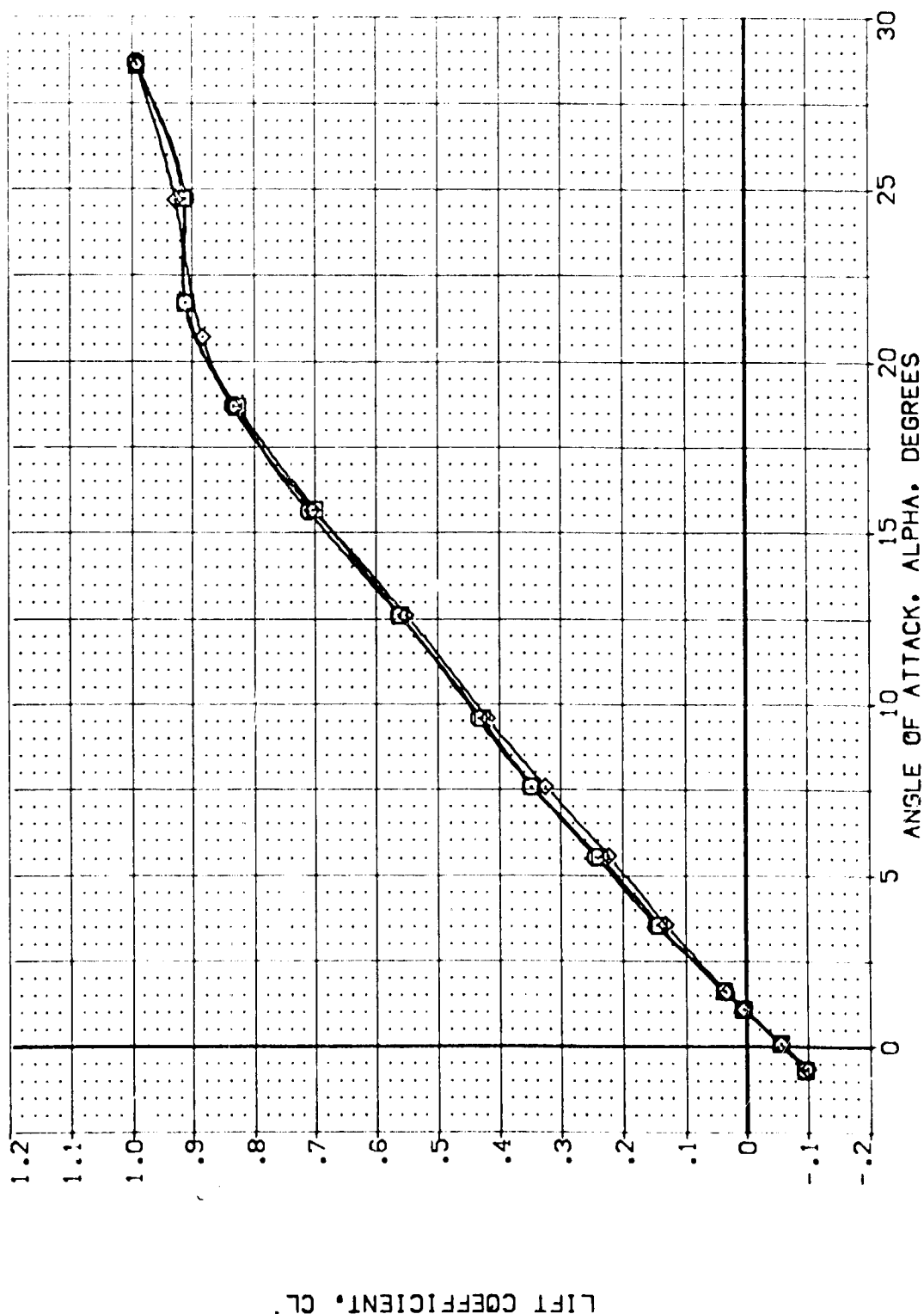
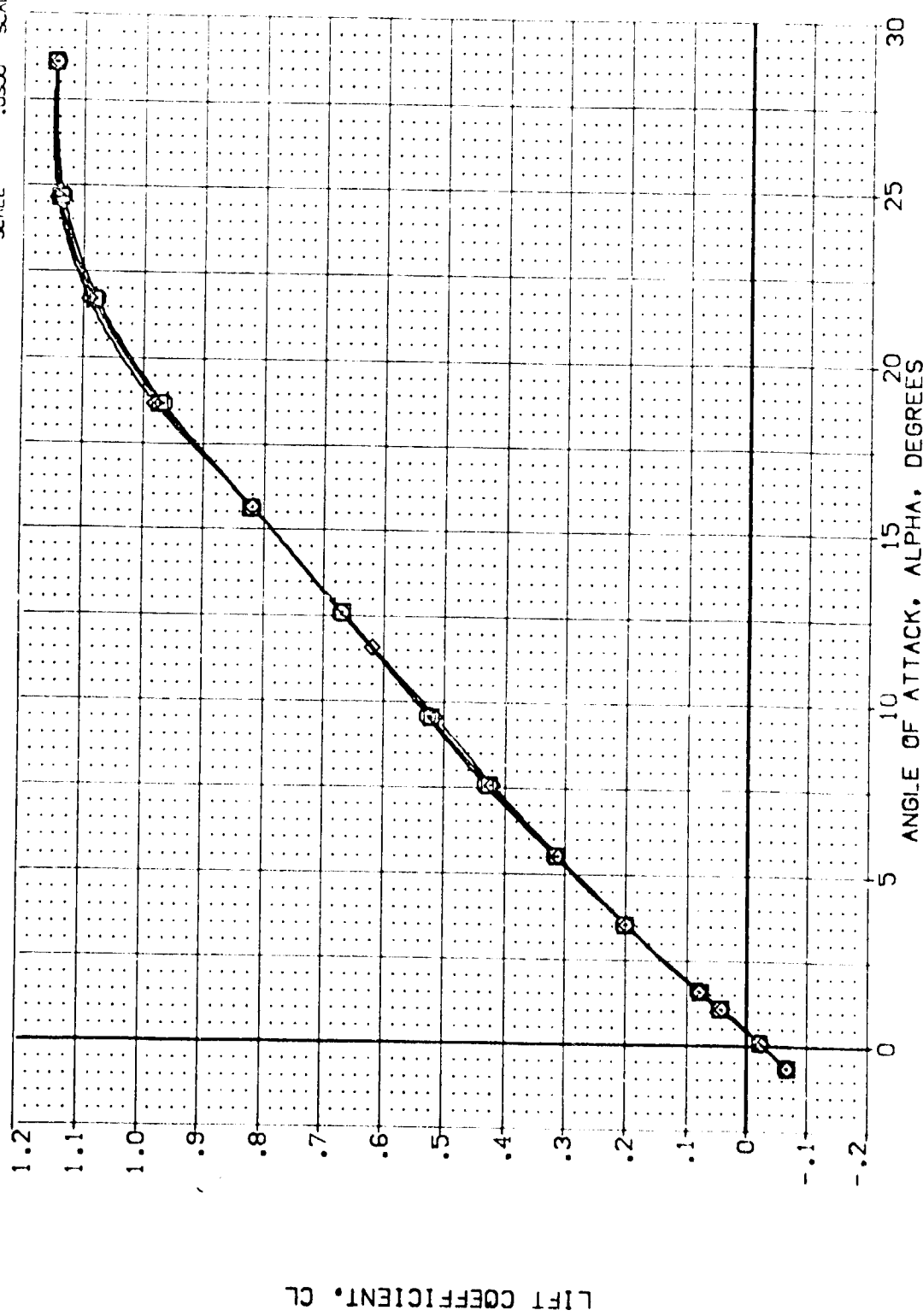


FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

— (C)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RV/L	AIRLON	BOFLAP	SPDBRK	REFERENCE INFORMATION
(TEJR17)	ARC 11-747 OAS3A B C M F VI V	5.100	.000	.000	25.000	SREF 2.4210 SQ.FT.
(TEJR16)	ARC 11-747 OAS3A B C M F VI V	3.700	.000	.000	25.000	LREF 14.2440 IN.
(TEJR15)	ARC 11-747 OAS3A B C M F VI V	2.200	.000	.000	25.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP 11.0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300



LIFT COEFFICIENT, CL

FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

(D)MACH = 1.05

DATA SET SYMBOL: CONFIGURATION DESCRIPTION

TEJRI(7)	ARC 11-747 OAS3A B C M F VI	V	HIGH RV/L	RV/L	ALLRON	BOFLAP	SPDBRK	REFERENCE INFORMATION
TEJRI(6)	ARC 11-747 OAS3A B C M F VI	V	NOM. RV/L	3.700	.000	.000	25.000	SREF 2.4210 SQ.FT.
TEJRI(5)	ARC 11-747 OAS3A B C M F VI	V	LOW RV/L	2.200	.000	.000	25.000	LREF 14.2440 IN.
								BREF 28.1004 IN.
								XMRP 32.3010 IN.
								YMRP .0000 IN.
								ZMRP 11.2500 IN.
								SCALE .0300

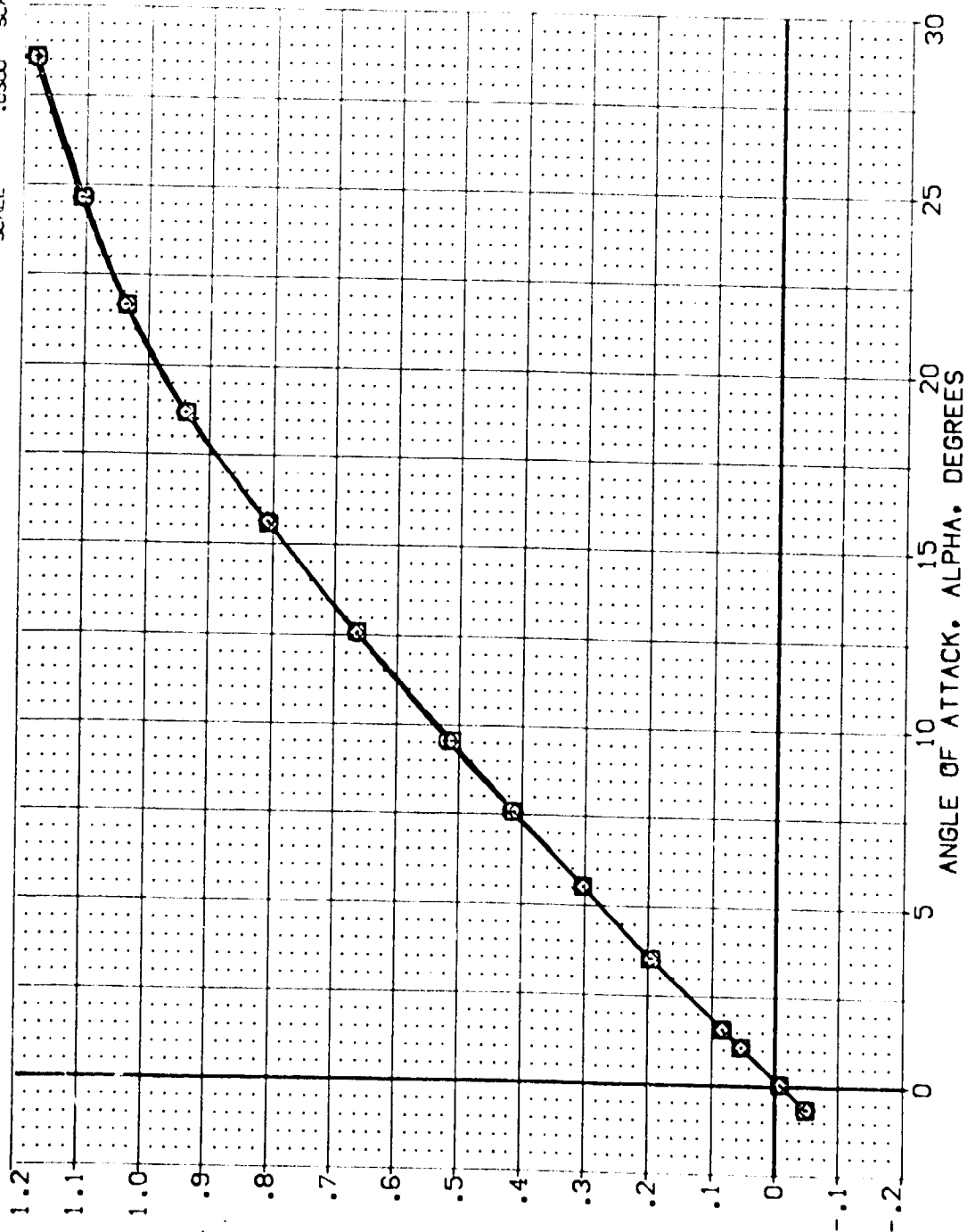


FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

(M)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RV/L	AILRON	BOFLAP	SPOBRK	REFERENCE INFORMATION
(TEJR17)	ARC 11-747 OAS3A B C M F V1 V	5.100	.000	.000	25.000	SREF 2.4210 SQ.FT.
(TEJR16)	ARC 11-747 OAS3A B C M F V1 V	3.700	.000	.000	25.000	LREF 14.2440 IN.
(TEJR15)	ARC 11-747 OAS3A B C M F V1 V	2.200	.000	.000	25.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

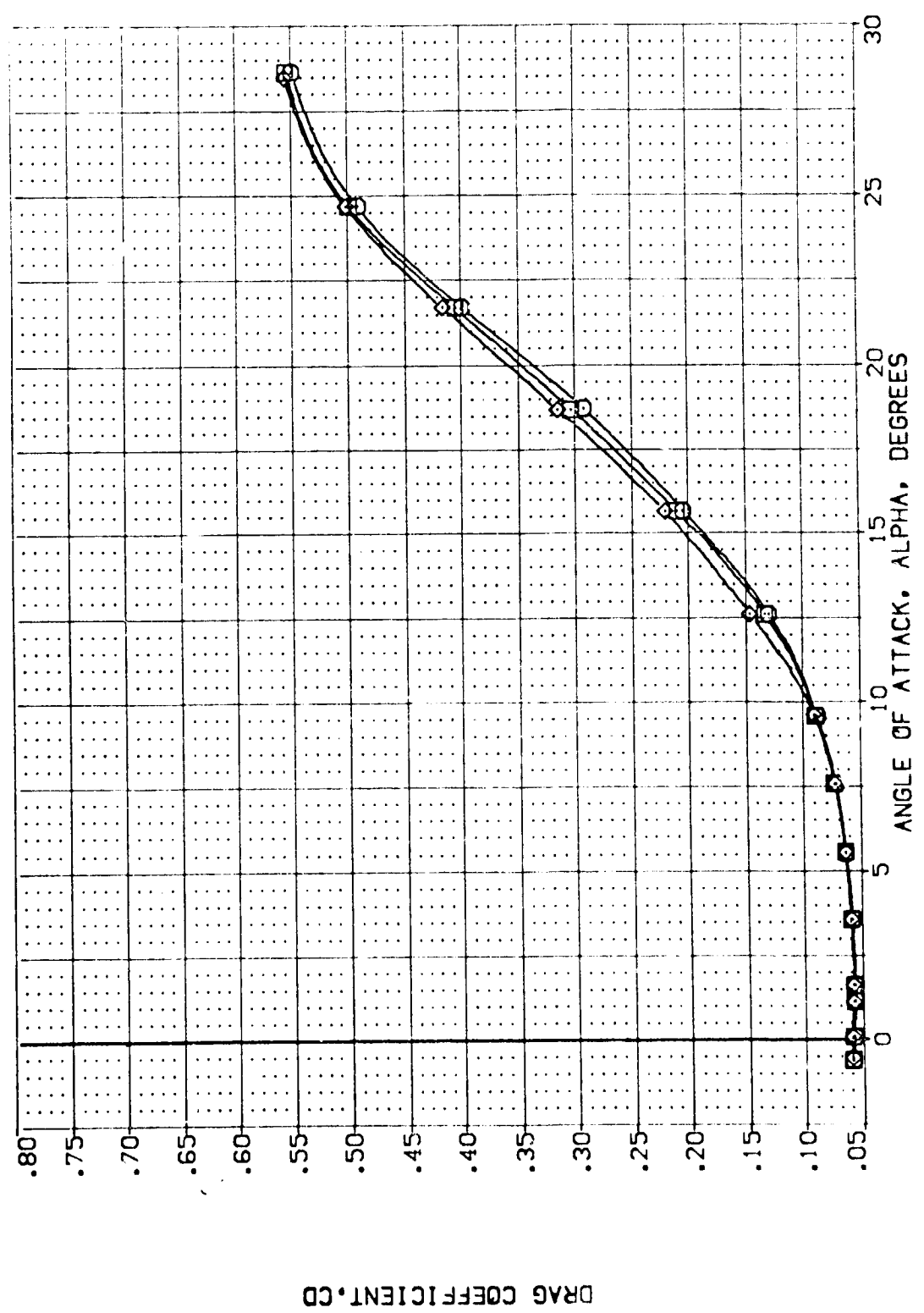


FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

(A)MACH = .60



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	AILRON	BOFLAP	SPOBRK	REFERENCE INFORMATION
{TEJR17}	ARC 11-747 DA53A B C M F VI V	5.100	.000	.000	25.000	SREF 2.4210 SQ.FT.
{TEJR16}	ARC 11-747 DA53A B C M F VI V	3.700	.000	.000	25.000	LREF 14.2440 IN.
{TEJR15}	ARC 11-747 DA53A B C M F VI V	2.200	.000	.000	25.000	BREF 28.1004 IN.
						XMPP .0000 IN.
						YMPP .0000 IN.
						ZMPP 11.2530 IN.
						SCALE .0300

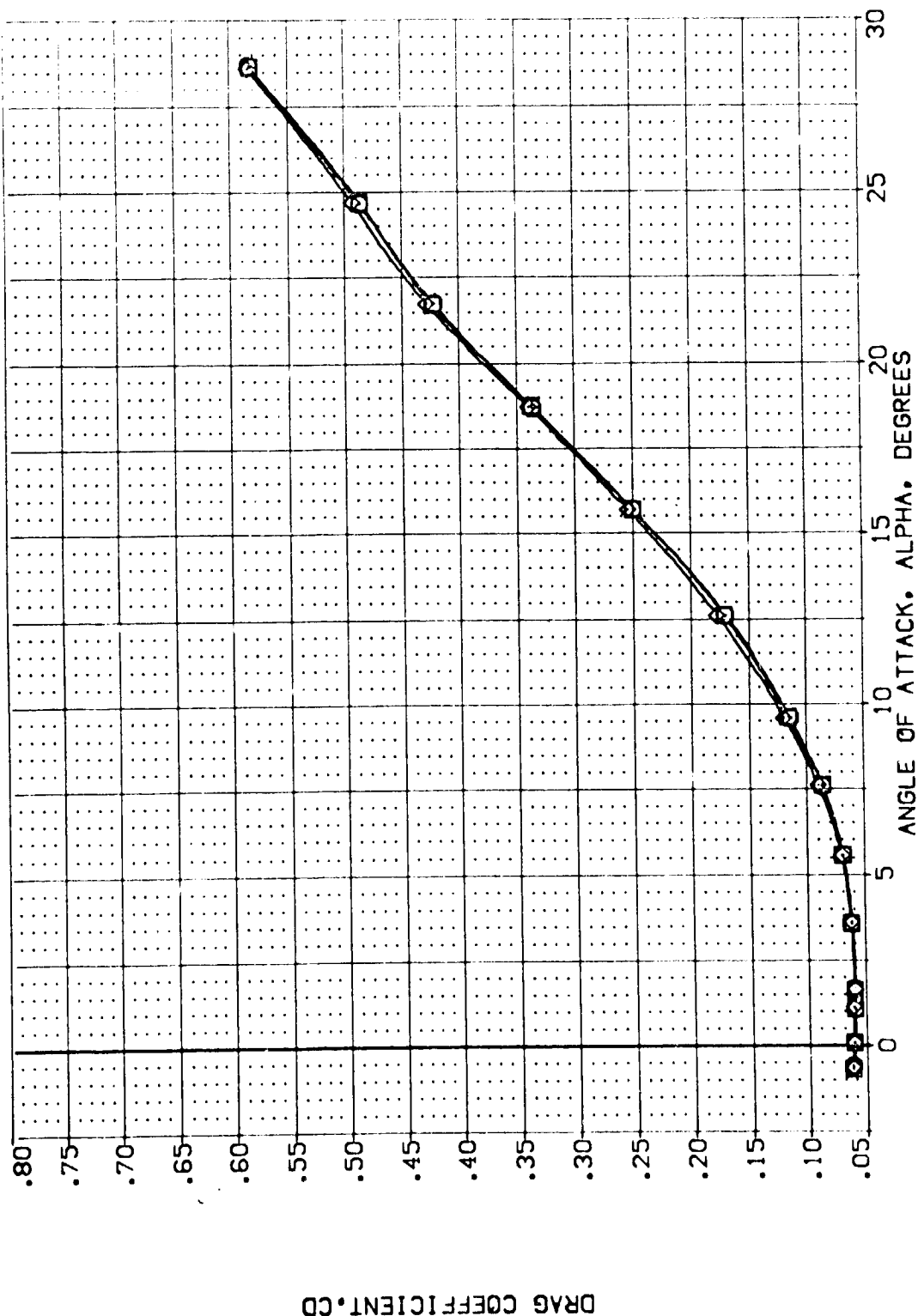


FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

(B)MACH = .80



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RV/L	AIL/ON	BD/LAP	SP/BRK	REFERENCE INFORMATION
{TEJRI7}	ARC 11-747 DA53A B C M F V1 V	5.100	.000	.000	25.000	SREF 2.4210 SQ.FT.
{TEJRI6}	ARC 11-747 DA53A B C M F V1 V	3.700	.000	.000	25.000	LREF 14.2440 IN.
{TEJRI5}	ARC 11-747 DA53A B C M F V1 V	2.200	.000	.000	25.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

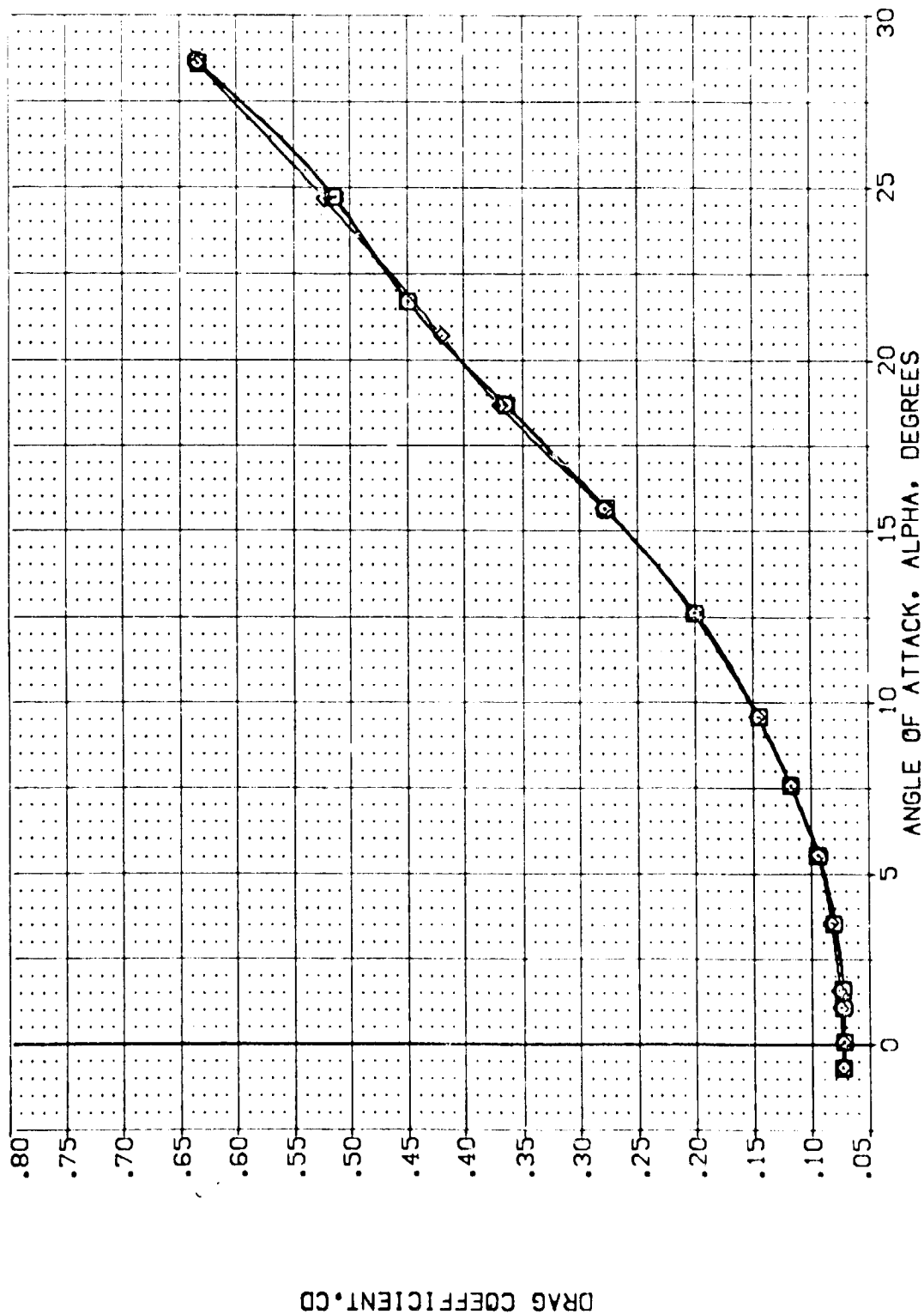


FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

(C)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RV/L	AIRLON	BOFLAP	SPOBRK	REFERENCE INFORMATION
{TEJR17}	ARC 11-747 OA53A B C M F VI V	5.100	.000	.000	25.000	SREF 2.4210 SQ.FT.
{TEJR16}	ARC 11-747 OA53A B C M F VI V	3.700	.000	.000	25.000	LREF 14.2440 IN.
{TEJR15}	ARC 11-747 OA53A B C M F VI V	2.200	.000	.000	25.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

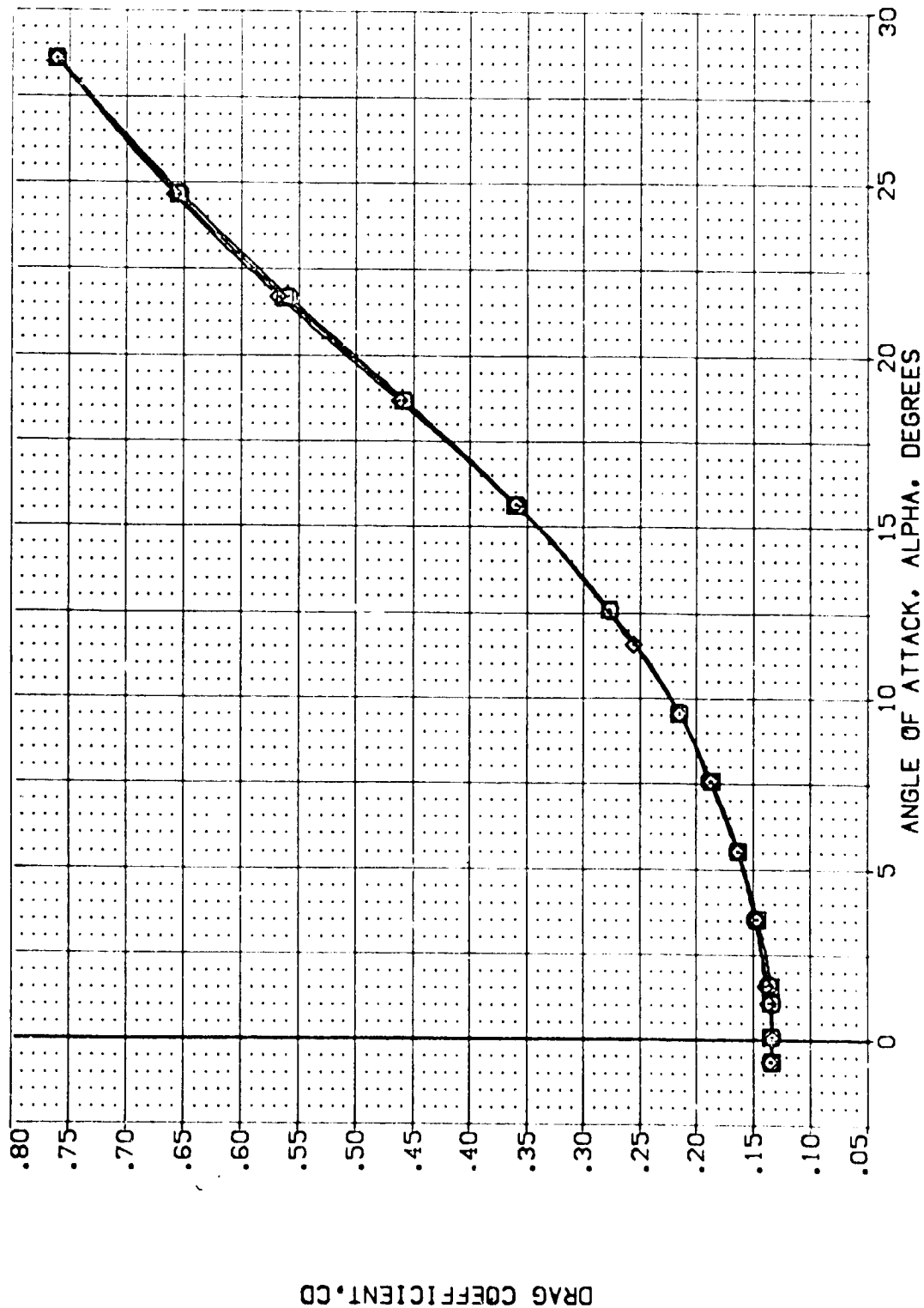


FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

(O)MACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RV/L	AIL/ON	BO/LAP	SP/BRK	REFERENCE INFORMATION
(TEJR17)	ARC 11-747 CAS3A B C M F V1 V	5.100	.000	.000	25.000	SREF 2.4210 SQ.FT.
(TEJR16)	ARC 11-747 CAS3A B C M F V1 V	3.700	.000	.000	25.000	LREF 14.2440 IN.
(TEJR15)	ARC 11-747 CAS3A B C M F V1 V	2.200	.000	.000	25.000	BREF 28.1004 IN.
						YMPP 32.3010 IN.
						ZMPP .0000 IN.
						SCALE 11.2500 IN.
						SCALE .0300

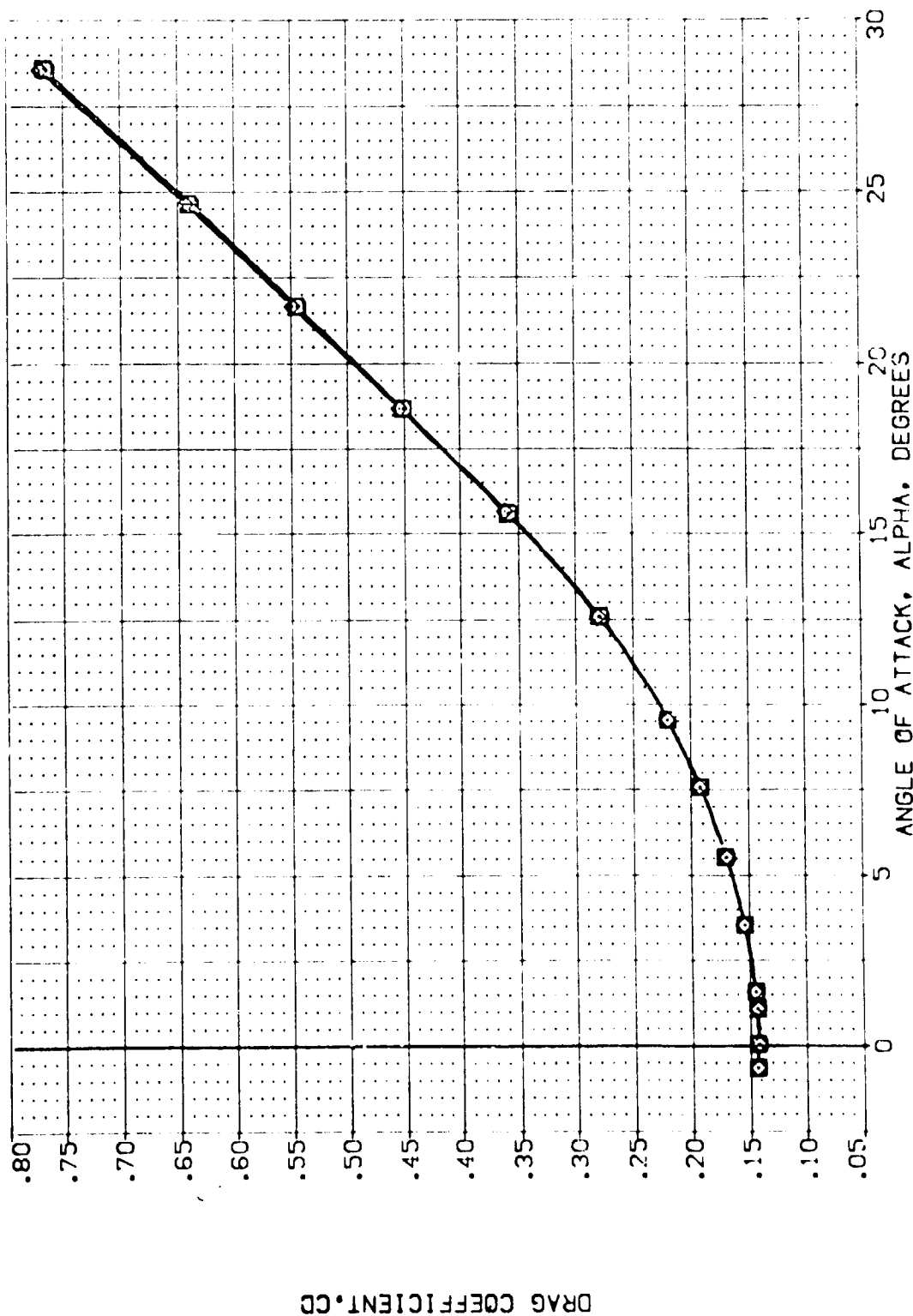


FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

(CD)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RV/L	AILLON	BULFLAP	SPOBRK	REFERENCE INFORMATION
(TEJR17)	ARC 11-747 DA53A B C M F V1 V	5.100	.000	.000	25.000	SREF 2.4210 SQ.FT.
(TEJR16)	ARC 11-747 DA53A B C M F V1 V	3.700	.000	.000	23.000	LREF 14.2440 IN.
(TEJR15)	ARC 11-747 DA53A B C M F V1 V	2.200	.000	.000	25.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

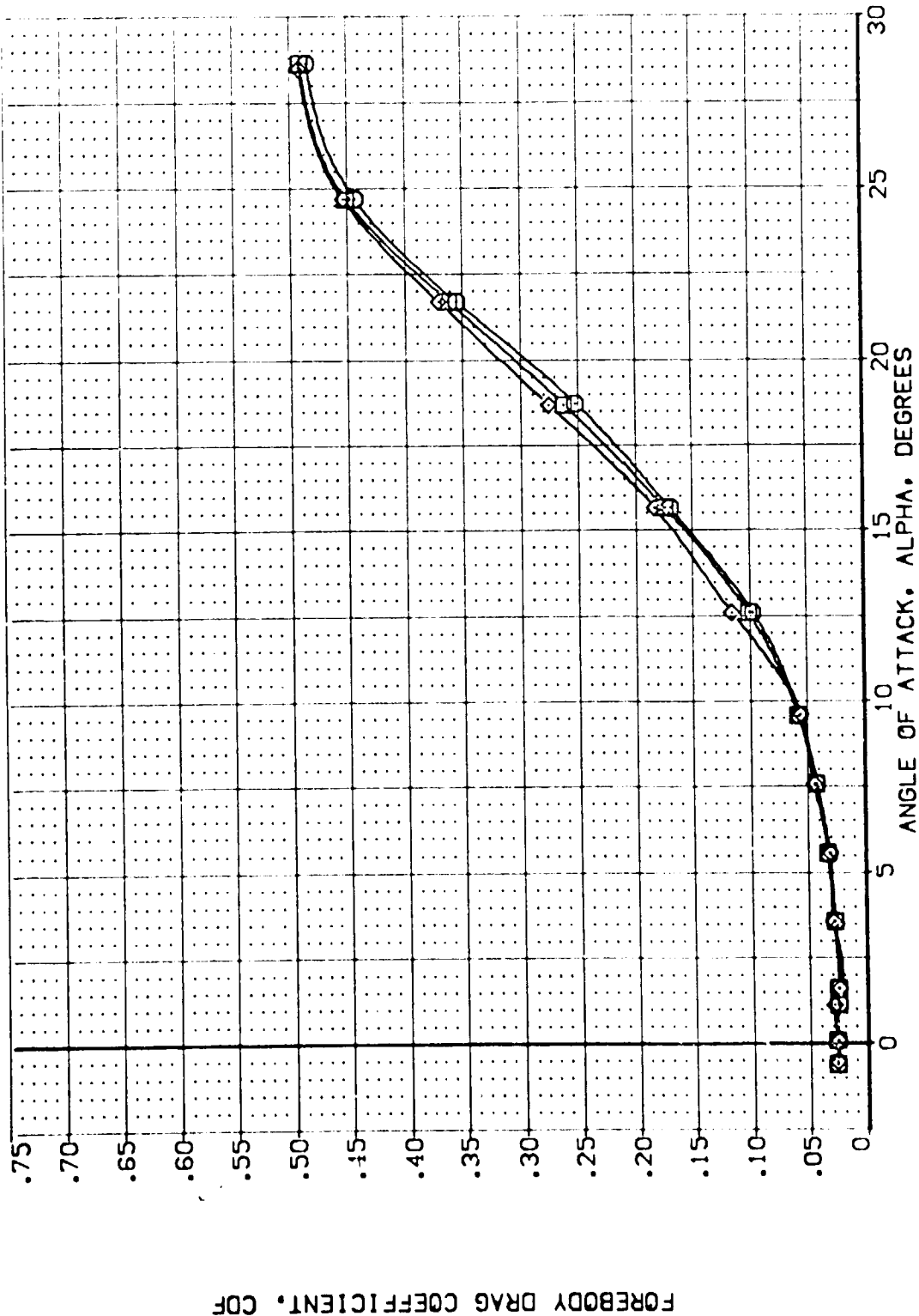


FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

(MACH = .60)

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RV/L	AIL/ROD	BDF/LAP	SPO/BRK	REFERENCE INFORMATION
(TEAR17)	ARC 11-747 DA53A B C H F VI V	5.100	.000	.000	25.000	SREF 2.4210 SQ.FT.
(TEAR16)	ARC 11-747 DA53A B C H F VI V	3.700	.000	.000	25.000	LREF 14.2440
(TEAR15)	ARC 11-747 DA53A B C H F VI V	2.200	.000	.000	25.000	BREF 28.1004
						YMRP 32.3010
						ZMRP .0000
						SCALE 11.2500

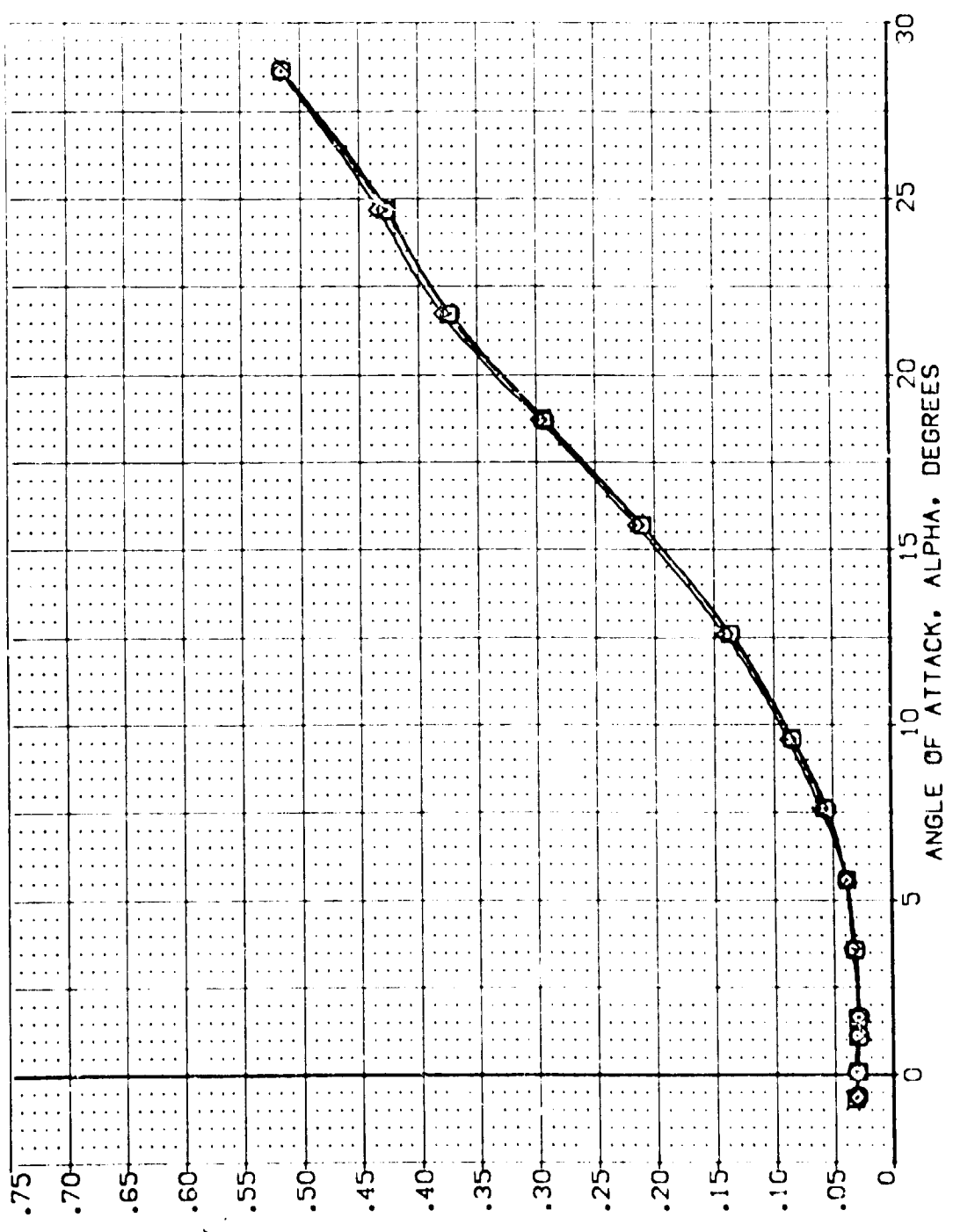


FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS  
(B)MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RV/L	AILRON	BD/LAP	SP/BRK	REFERENCE INFORMATION
(TEJR17)	ARC 11-747 GA53A B C M F VI V	5.100	.000	.000	25.000	SREF 2.4210 SQ.FT.
(TEJR16)	ARC 11-747 GA53A B C M F VI V	3.700	.000	.000	25.000	LREF 14.2440 IN.
(TEJR15)	ARC 11-747 GA53A B C M F VI V	2.200	.000	.000	25.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .03700

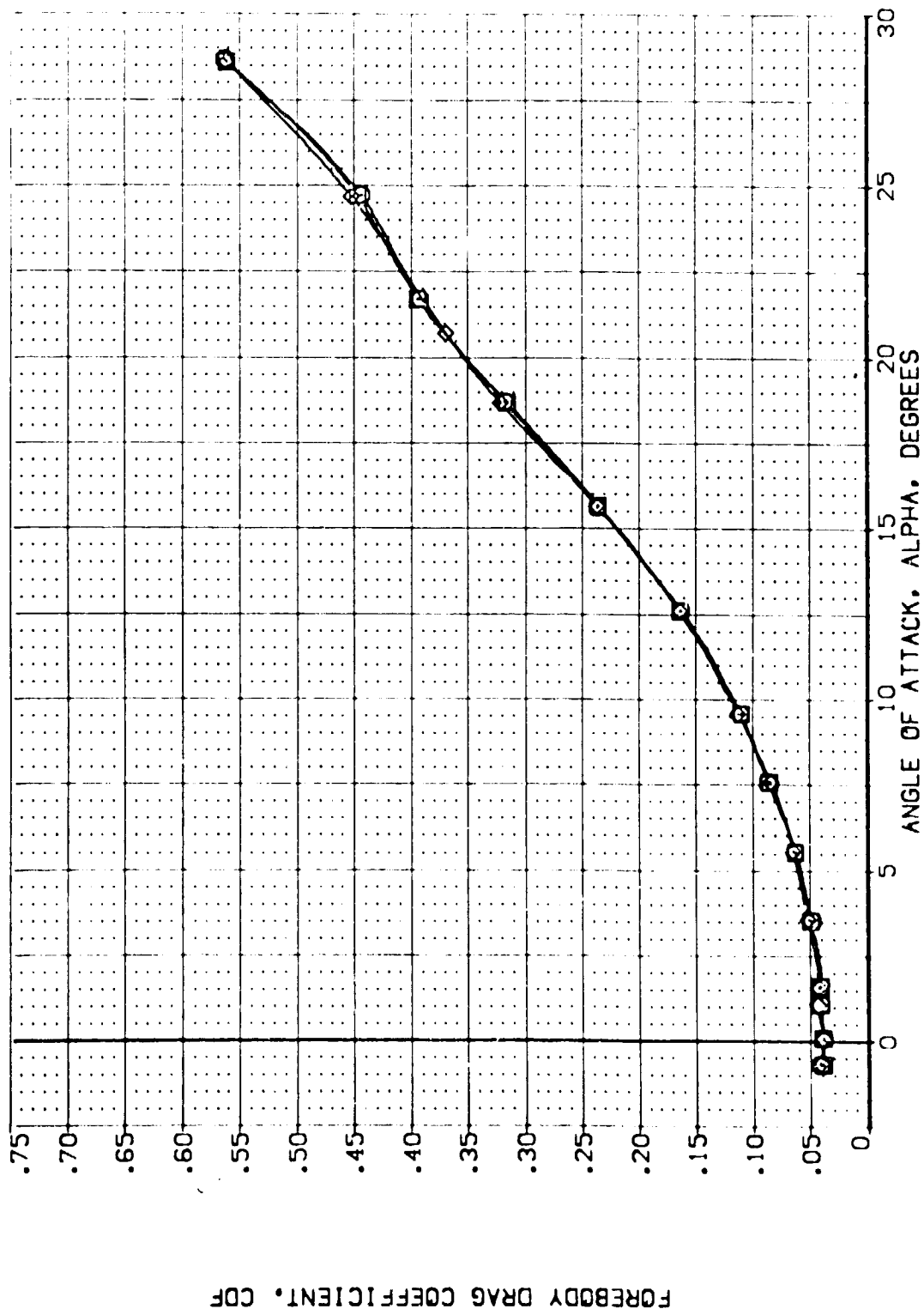


FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

(C)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RV/L	AT/LRN	BDF/LAP	SP/DBRK	REFERENCE INFORMATION
(TEUR:7)	ARC 11-747 OA53A B C M F VI	5.100	.000	.000	25.000	SREF 2.4210 SQ.FT.
(TEUR:6)	ARC 11-747 OA53A B C M F VI	3.700	.000	.000	25.000	LREF 14.2440 IN.
(TEUR:5)	ARC 11-747 OA53A B C M F VI	2.200	.000	.000	25.000	BREF 28.1004 IN.
						XMREF 32.3010 IN.
						YMREF .0000 IN.
						ZMREF 11.2500 IN.
						SCALE .0000

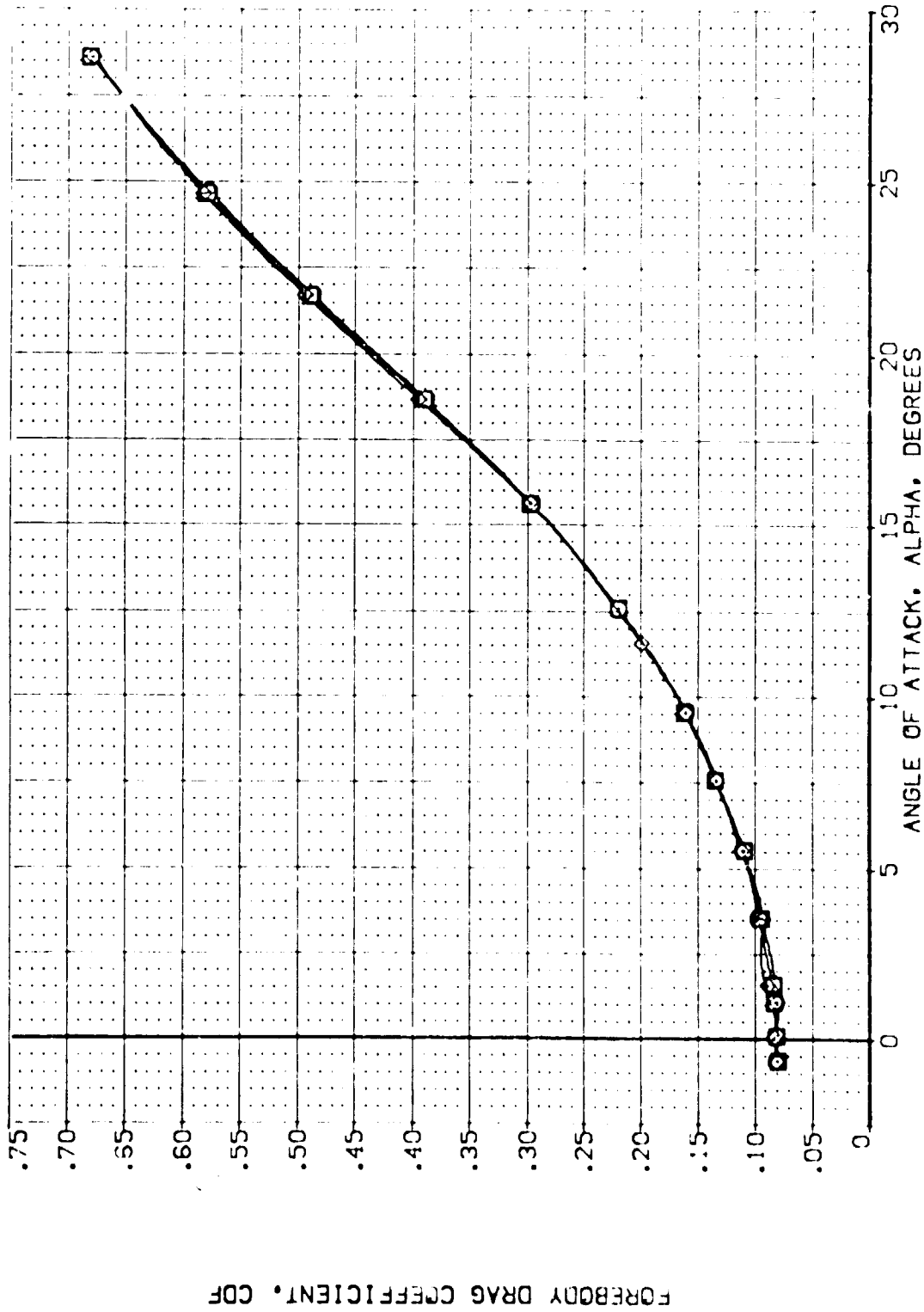


FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

(C)MACH = 1.05



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RV/L	ALLRON	BOFLAP	SPDRM	REFERENCE INFORMATION
(TEJRI7)	ARC 11-747 OAS3A B C M F VI V	5.100	.000	.000	25.000	SREF 2.4210 50. FT.
(TEJRI6)	ARC 11-747 OAS3A B C M F VI V	3.700	.000	.000	25.000	LREF 14.2440
(TEJRI5)	ARC 11-747 OAS3A B C M F VI V	2.200	.000	.000	25.000	BREF 28.1004
						XMRP 32.3010
						YMRP .0000
						ZMRP 11.2500
						SCALE .0300

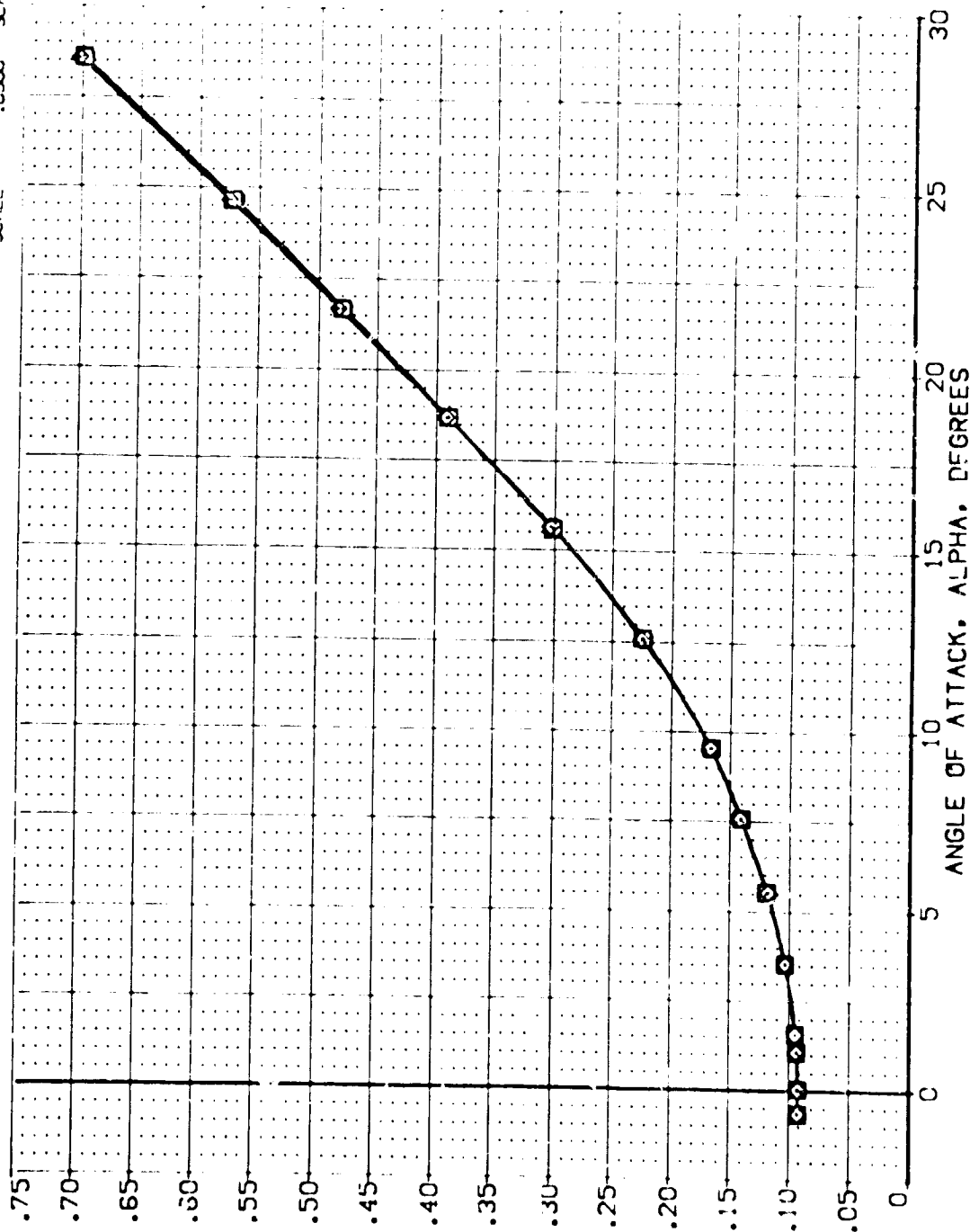


FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

(E)MACH = 1.20

DATA SET (SYMBOL)	CONFIGURATION DESCRIPTION	RN/L	AIRFOIL	BOFLAP	SPOBRK	REFERENCE INFORMATION
{TEJR17}	ARC 11-747 QAS3A B C M F VI V	5.100	.000	.000	25.000	SREF 2.4210 SQ.FT.
{TEJR16}	ARC 11-747 QAS3A B C M F VI V	3.700	.000	.000	25.000	LREF 14.2440 N.
{TEJR15}	ARC 11-747 QAS3A B C M F VI V	2.200	.000	.000	25.000	BREF 28.1004 N.
						XMRP 32.3010 N.
						YMRP .0000 N.
						ZMRP 11.2500 N.
						SCALE .0300 SCALE

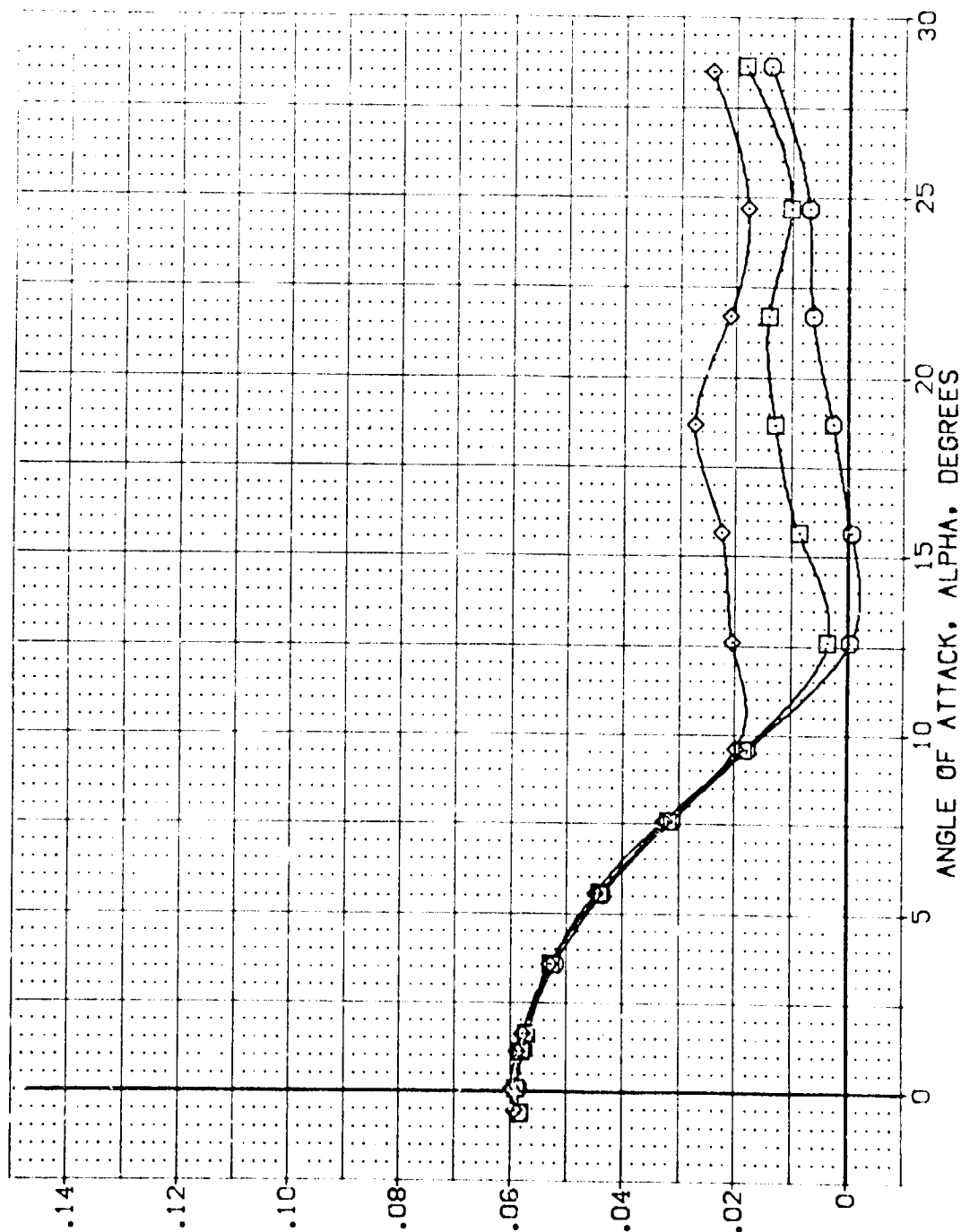


FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

(M)MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RV/L	AILRON	BD FLAP	SPDBRK	REFERENCE INFORMATION
(TEJR17)	ARC 11-747 DA53A B C M F V1 V	5.100	.000	.000	25.000	SREF 2.4210 SC.FT.
(TEJR16)	ARC 11-747 DA53A B C M F V1 V	3.700	.000	.000	25.000	LREF 14.2440 IN.
(TEJR15)	ARC 11-747 DA53A B C M F V1 V	2.200	.000	.000	25.000	BREF 28.1004 IN.
						XREF 32.3010 IN.
						YREF .0000 IN.
						ZREF 11.2500 IN.
						SCALE .0300

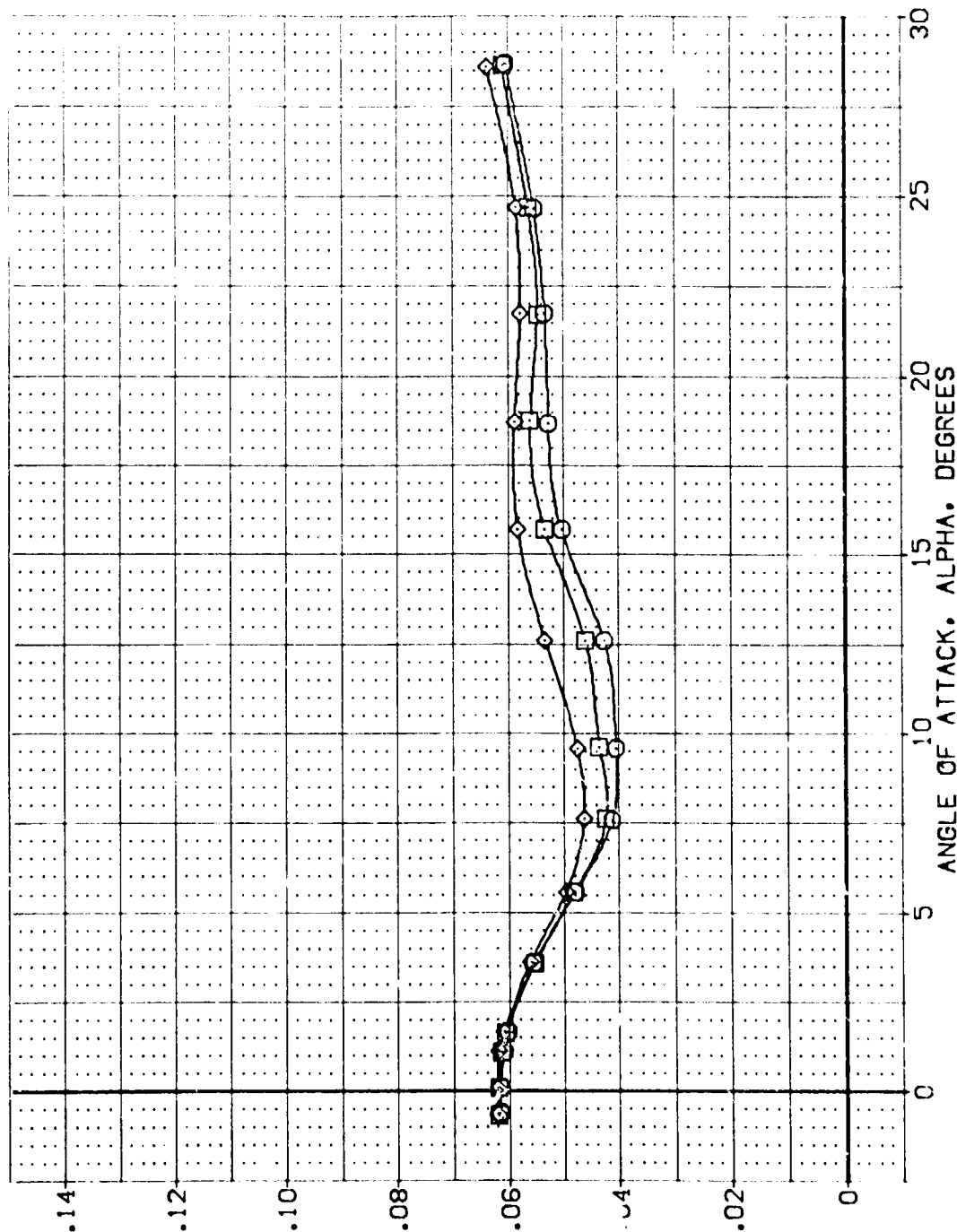
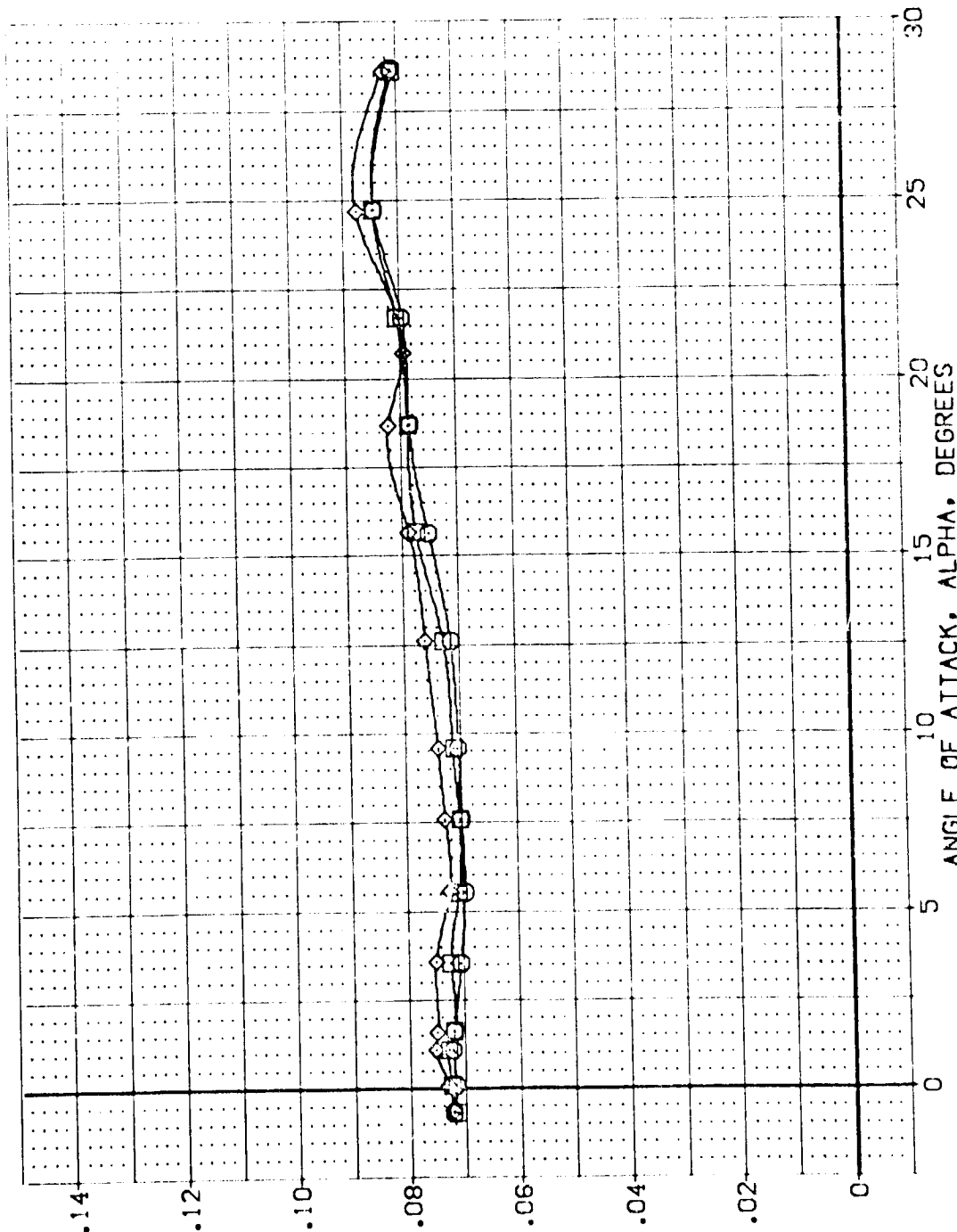


FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

(B)MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RV/L	ALLRON	BOFLAP	SPOBRK	REFERENCE INFORMATION
(TEJR17)	ARC 11-747 CAS3A B C M F VI	5.100	.000	.000	25.000	SREF 2.4210 SO.FT.
(TEJR16)	ARC 11-747 CAS3A B C M F VI	3.700	.000	.000	25.000	LREF 14.2440 IN.
(TEJR15)	ARC 11-747 CAS3A B C M F VI	2.200	.000	.000	25.000	BREF 28.1004 IN.
						XMRRP 32.3010 IN.
						YMRRP .0000 IN.
						ZMRRP 11.2500 IN.
						SCALE .0300



AXIAL FORCE COEFFICIENT, CA

FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

(C)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RV/L	AIL/ROD	BOFLAP	SPOBRK	REFERENCE INFORMATION
{TEJR17}	ARC 11-747 DAS3A B C M F V1	5.100	.000	.000	25.000	SREF 2.4210 SQ.FT.
{TEJR16}	ARC 11-747 DAS3A B C M F V1	3.700	.000	.000	25.000	LREF 14.2440 IN.
{TEJR15}	ARC 11-747 DAS3A B C M F V1	2.200	.000	.000	25.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

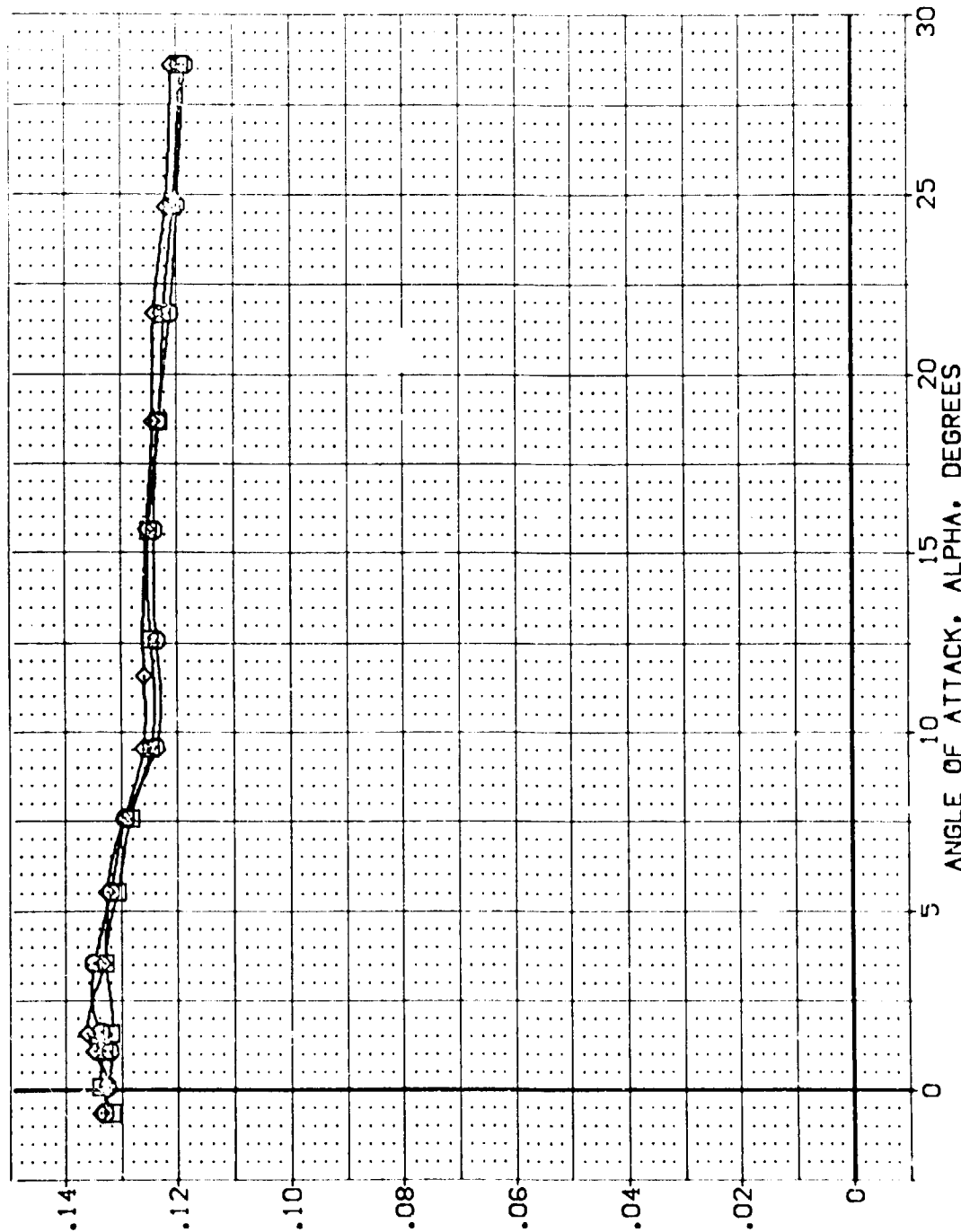


FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

(O)MACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RV/L	AILRON	BOFLAP	SPDRK	REFERENCE INFORMATION
[TEJR17]	ARC 11-747 DAS3A B C M F VI V	5.100	.000	.000	25.000	SREF 2.4210 SQ.FT.
[TEJR16]	ARC 11-747 DAS3A B C M F VI V	3.700	.000	.000	25.000	LREF 14.2440 IN.
[TEJR15]	ARC 11-747 DAS3A B C M F VI V	2.200	.000	.000	25.000	BREF 28.1004 IN.
						XMPP 32.3010 IN.
						YMPP .0000 IN.
						ZMPP 11.2500 IN.
						SCALE .0300

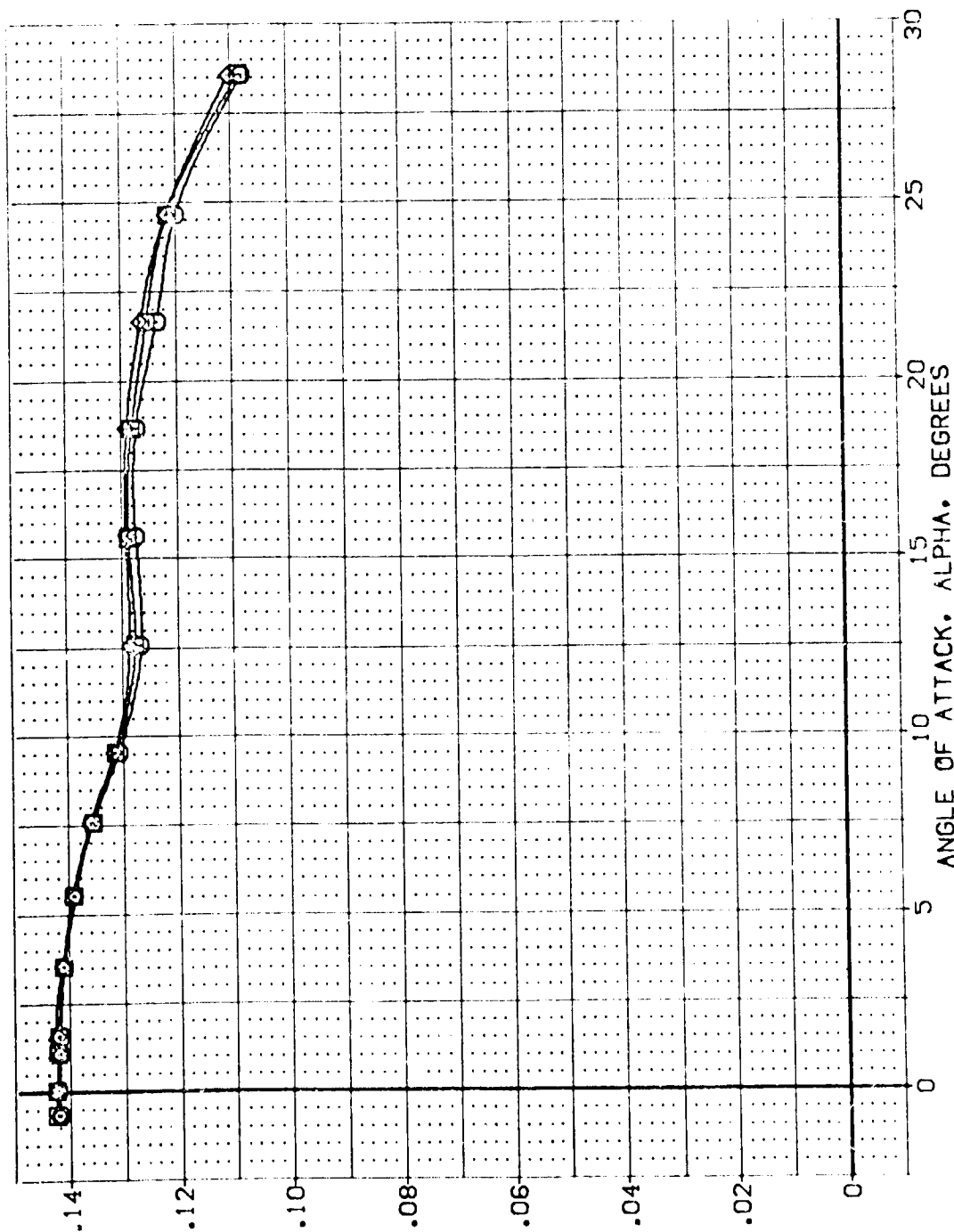


FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

(E)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RV/L	AIL/ON	BO/LAP	SPO/BRK	REFERENCE INFORMATION
{TEJR17}	ARC 11-747 QAS3A B C M F VI V	5.100	.000	.000	25.000	SREF 2.4210 SQ.FT.
{TEJR16}	ARC 11-747 QAS3A B C M F VI V	3.700	.000	.000	25.000	LREF 14.2440 IN.
{TEJR15}	ARC 11-747 QAS3A B C M F VI V	2.200	.000	.000	25.000	BREF 28.1004 IN.
						XM/RP 32.3010 IN.
						YM/RP .0000 IN.
						ZM/RP 11.2500 IN.
						SCALE .0300

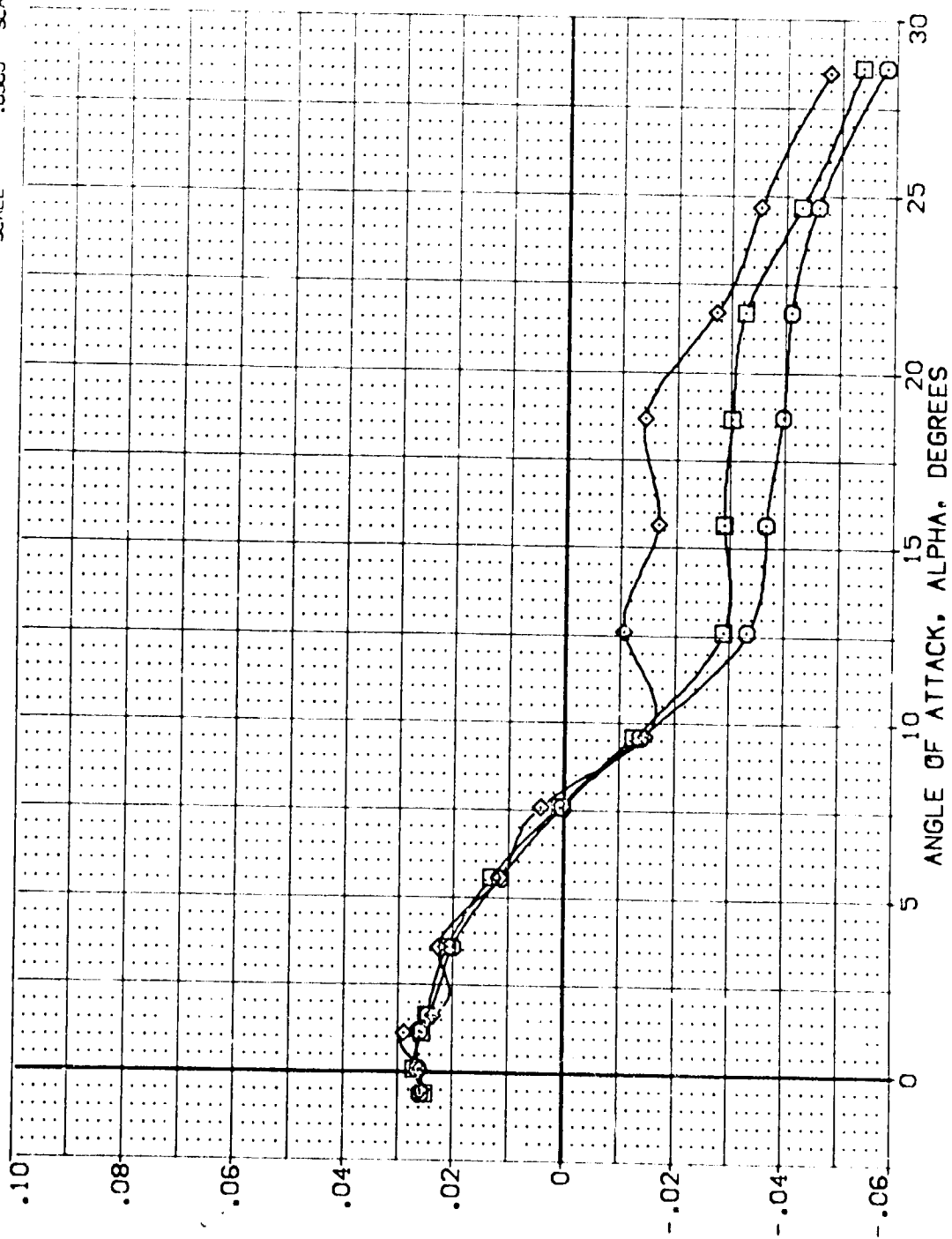
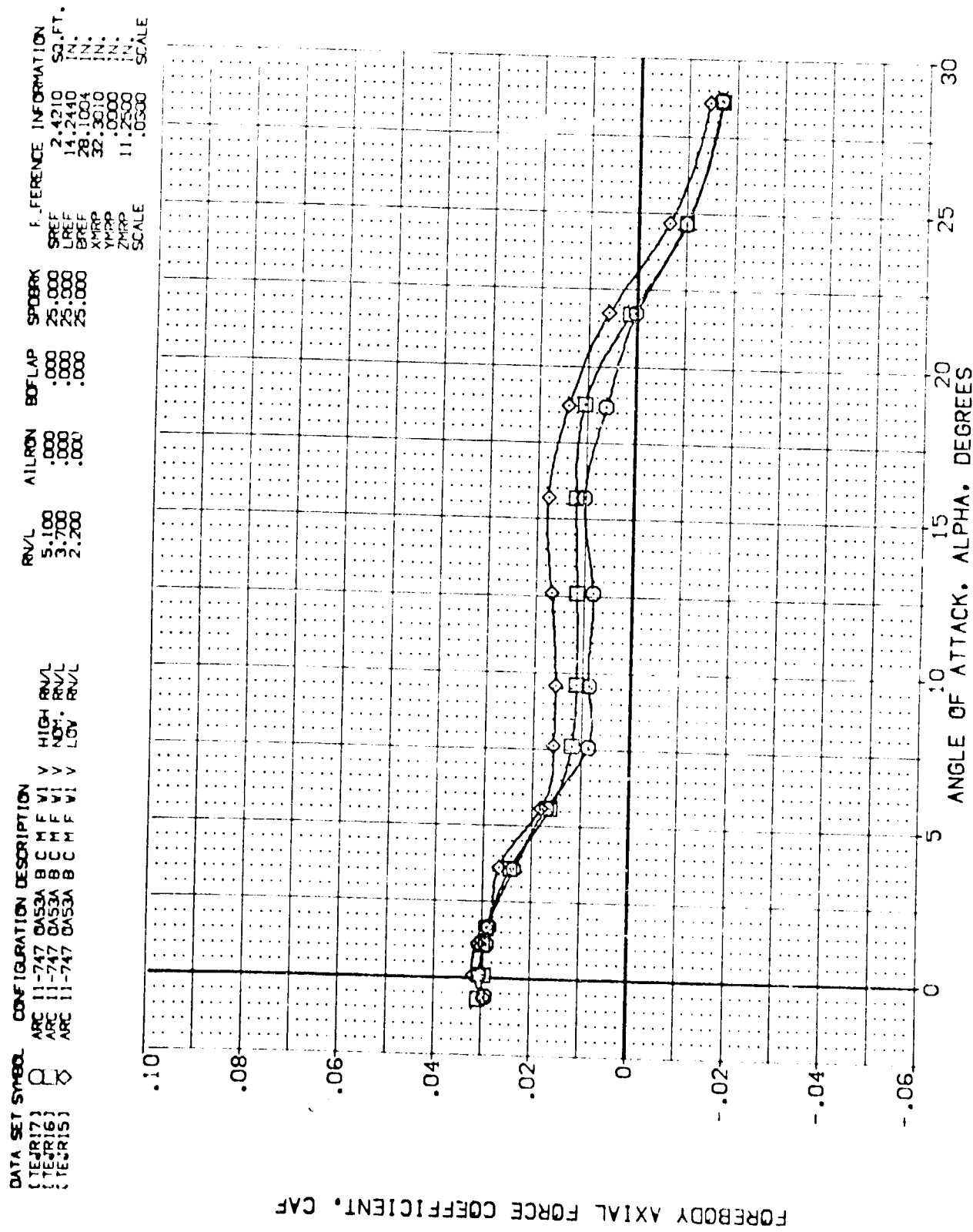


FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

(A)MACH = .60





DATA SET SYMBOL	CONF IGURATION DESCRIPTION	HIGH R/V/L	LOW R/V/L	R/V/L	AIRLON	BOFLAP	SPOBRK	REFERENCE INFORMATION
(TEJR17)	ARC 11-747 DA53A B C M F VI V			5.100	.000	.000	25.000	SREF 2.4210 SQ.FT.
(TEJR16)	ARC 11-747 DA53A B C M F VI V			3.700	.000	.000	25.000	LREF 14.2440 IN.
(TEJR15)	ARC 11-747 DA53A B C M F VI V			2.200	.000	.000	25.000	BREF 28.1004 IN.
								XMRP .0000 IN.
								ZMRP 11.2500 IN.
								SCALE .0300

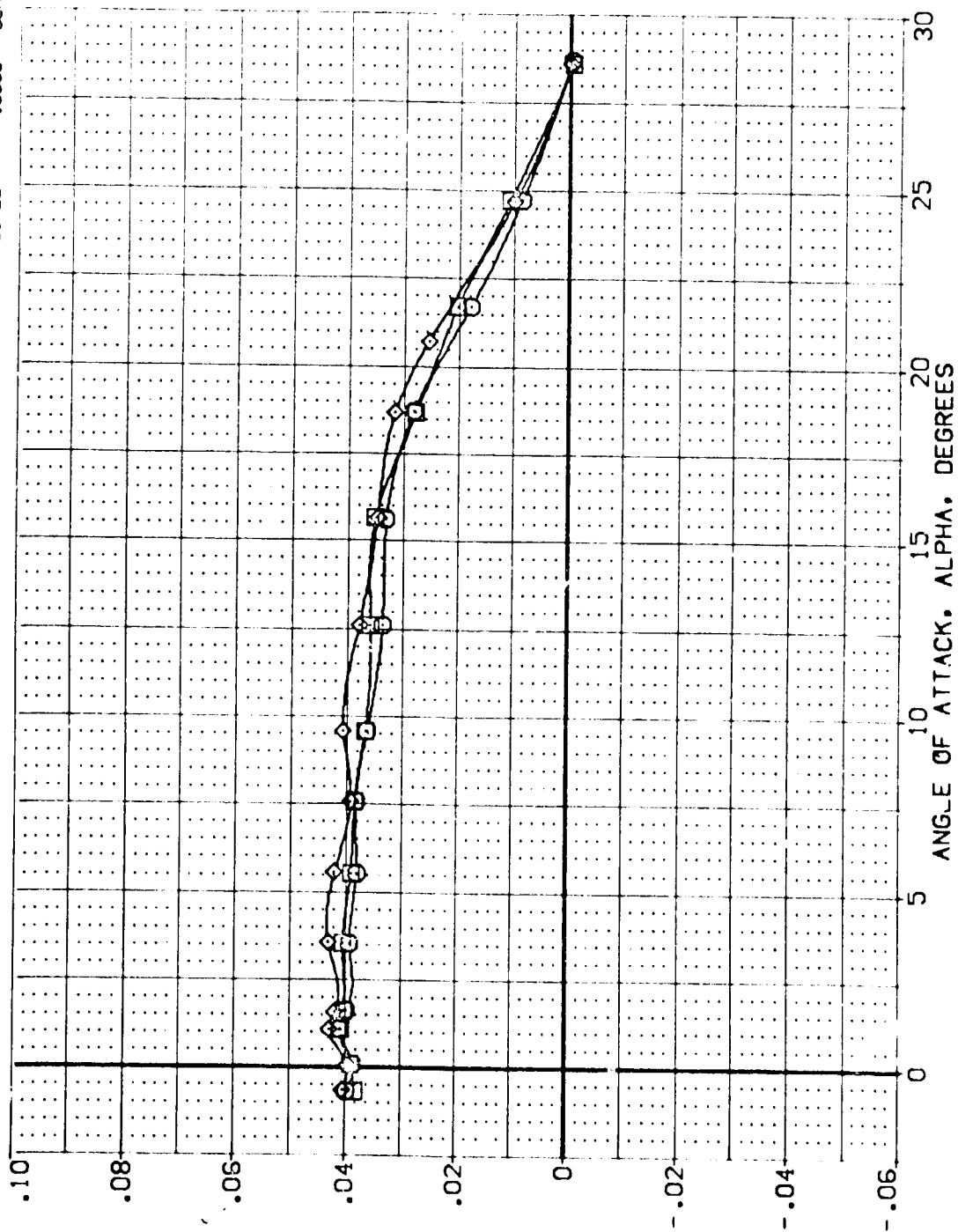


FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

(C)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RV/L	AIL/RON	BO/LAP	SP/BRK	REFERENCE INFORMATION
(TEJR17)	ARC 11-747 DA53A B C M F V I V	5.100	.000	.000	25.000	SREF 2.4210 SQ.FT.
(TEJR16)	ARC 11-747 DA53A B C M F V I V	3.700	.000	.000	25.000	LREF 14.2440 IN.
(TEJR15)	ARC 11-747 DA53A B C M F V I V	2.200	.000	.000	25.000	BREF 28.1004 IN.
						XMSP 32.3010 IN.
						VMSP .0000 IN.
						ZMSP 11.2500 IN.
						SCALE .0300

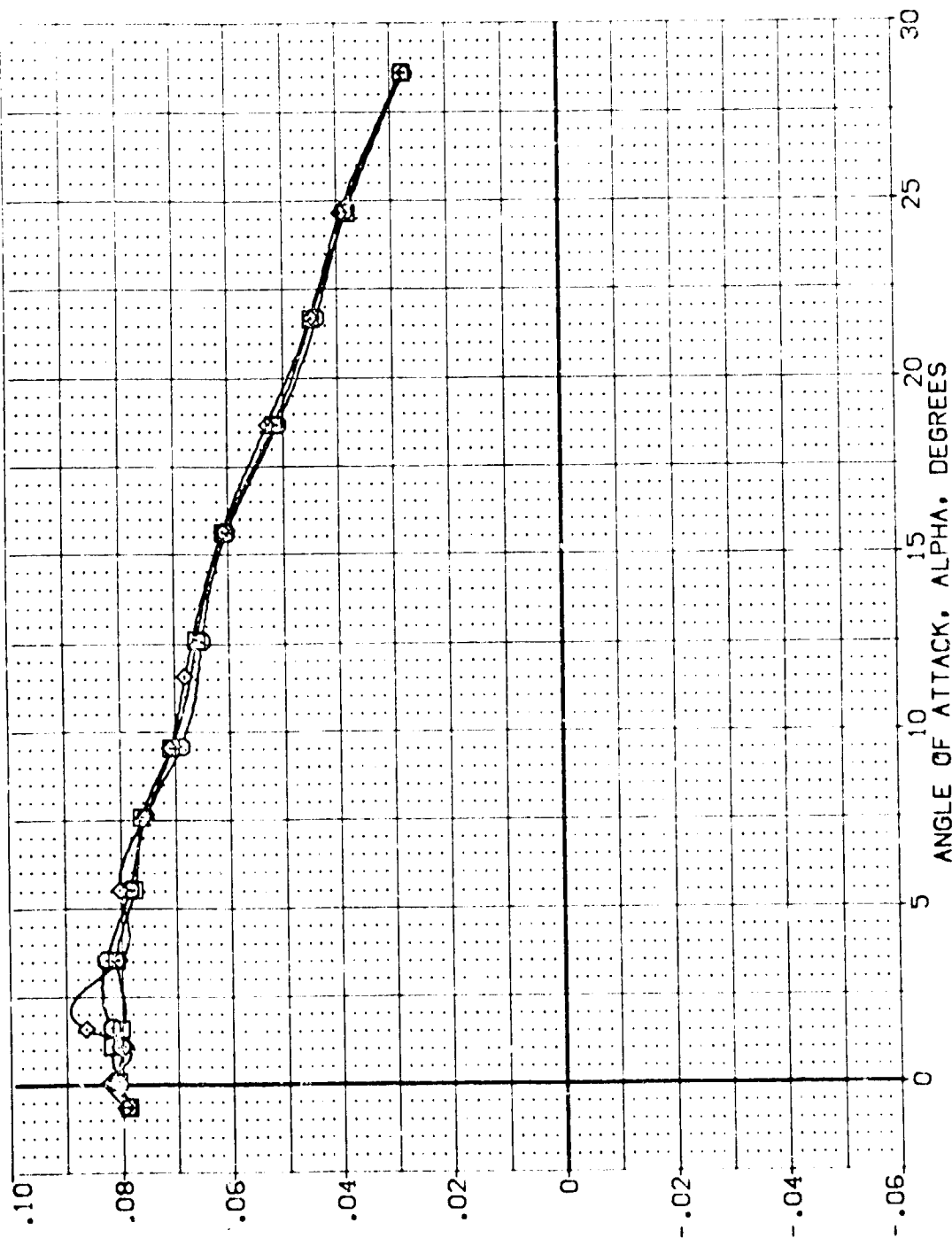
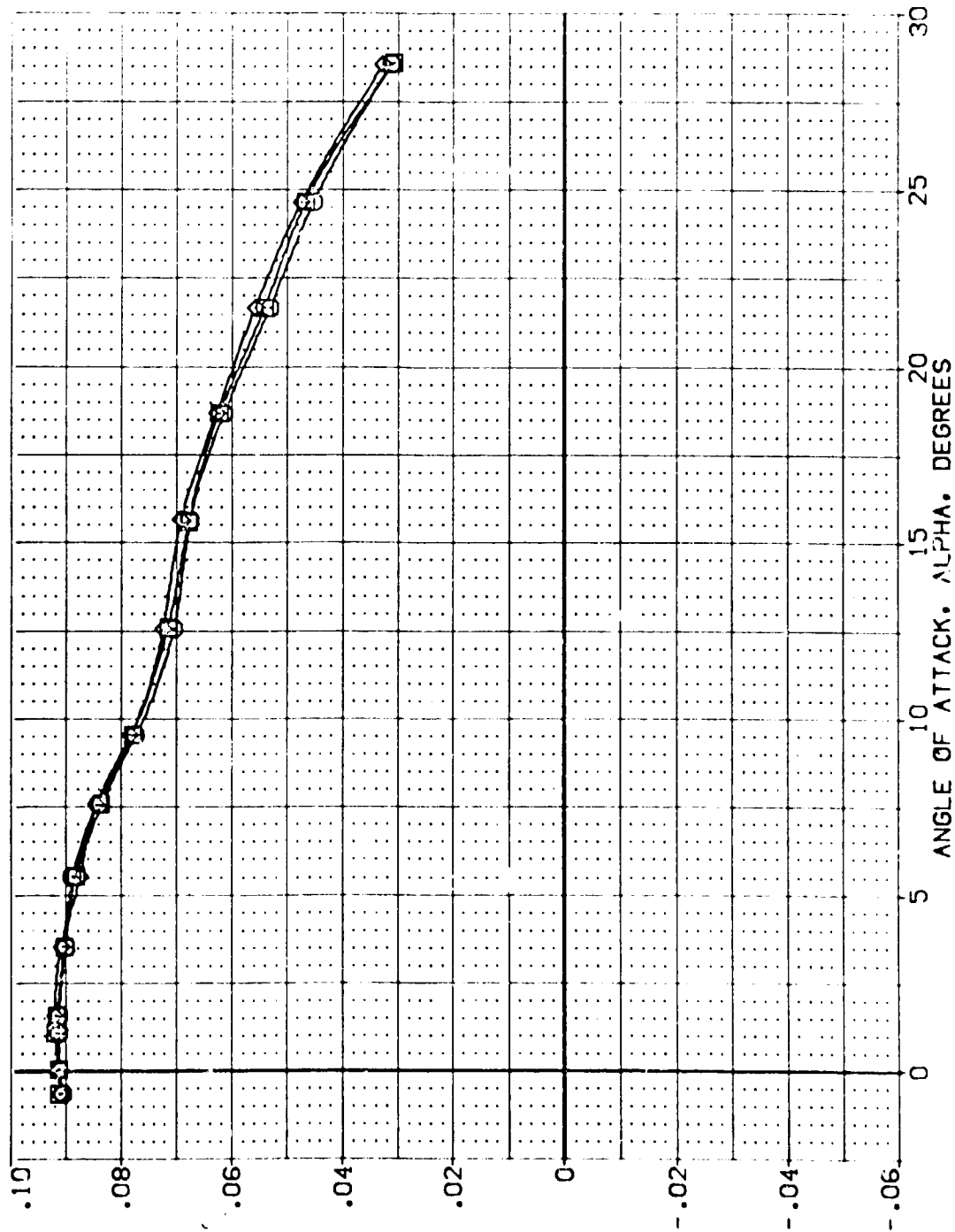


FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

(C)MACH = 1.05

DATA SET SYMBOL	CONFIGURATION, DESCRIPTION	RV/L	AT/LRN	BD/LAP	SP/BRK	REFERENCE INFORMATION
{TEJR17}	ARC 11-747 BA53A B C M F VI V	5.100	.000	.000	25.000	SREF 2.4210 50. FT.
{TEJR18}	ARC 11-747 BA53A B C M F VI V	3.700	.000	.000	23.000	LREF 14.2440 IN.
{TEJR15}	ARC 11-747 BA53A B C M F VI V	2.200	.000	.000	25.000	BREF 28.1004 IN.
						XMRP .0000 IN.
						YMRP .0000 IN.
						ZMRP .0000 IN.
						SCALE .0300

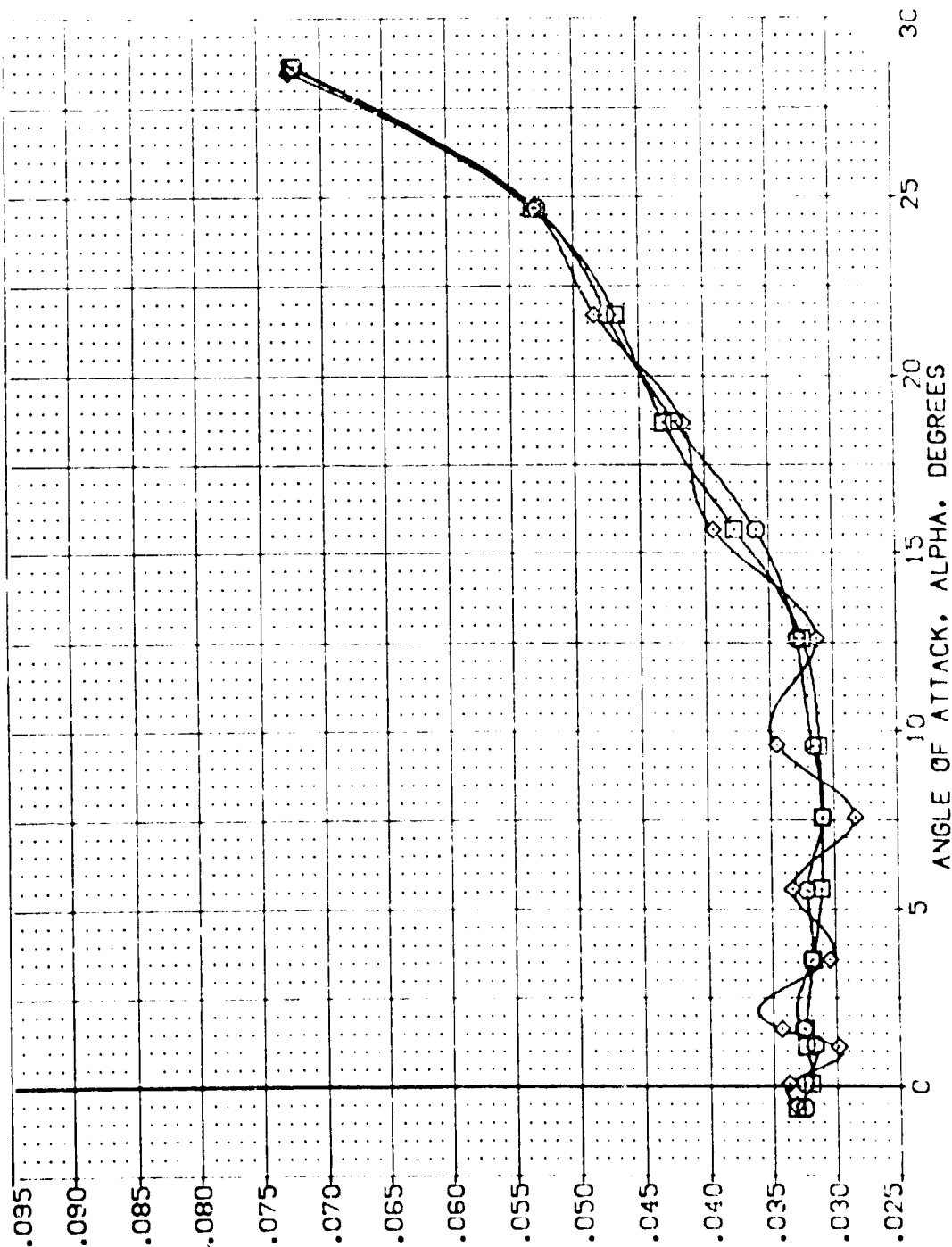


FOREBODY AXIAL FORCE COEFFICIENT, CAF

FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

REYNOLDS = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RV/L	ALL/ON	BO/LAP	SP/BRK	REFERENCE INFORMATION
(TEJRI7)	ARC 11-747 BAS3A B C M F V1	5.100	.000	.000	25.000	SREF 2.4210 SQ.FT.
(TEJRI6)	ARC 11-747 BAS3A B C M F V1	3.700	.000	.000	25.000	LREF 14.2440 IN.
(TEJRI5)	ARC 11-747 BAS3A B C M F V1	2.200	.000	.000	25.000	BREF 28.1004 IN.
						XMREF 32.3010 IN.
						YMREF .0000 IN.
						ZMREF .0000 IN.
						SCALE .0300

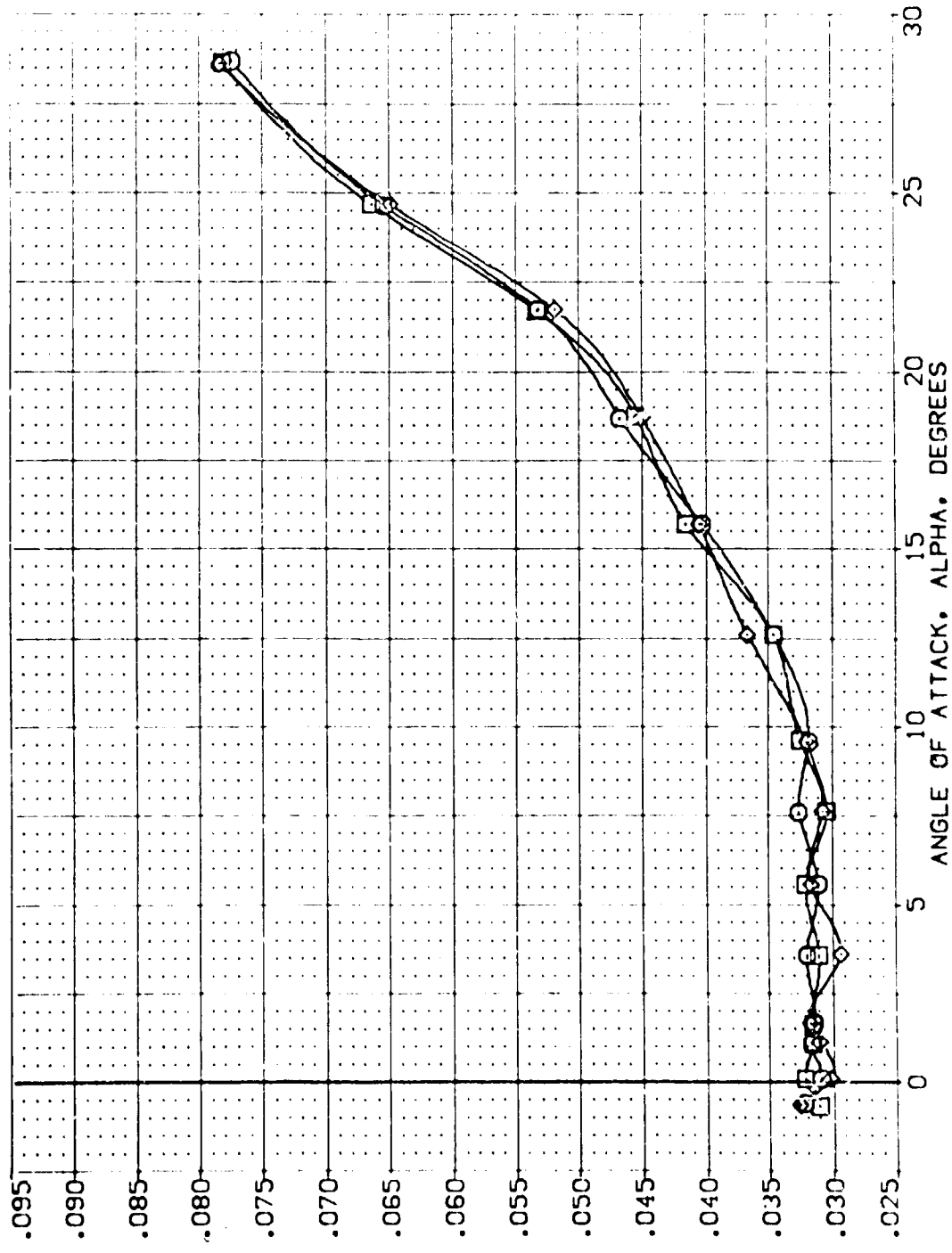


BASE AXIAL FORCE COEFFICIENT, CAB

FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

(A)MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RV/L	ALL/ON	BO/LAP	SPO/BRK	REFERENCE INFORMATION
{TEJRI7}	ARC 11-747 OAS3A B C M F VI V	5.100	.000	.000	25.000	SREF 2.4210 SO.FT. N.
{TEJRI6}	ARC 11-747 OAS3A B C M F VI V	3.700	.000	.000	25.000	LREF 14.2440 N.
{TEJRI5}	ARC 11-747 OAS3A B C M F VI V	2.200	.000	.000	25.000	BREF 28.1004 N.
						YMRP 32.3010 N.
						ZMRP .0000 N.
						SCALE 11.2500 N.



BASE AXIAL FORCE COEFFICIENT, CAB

FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

(B)MACH = .80



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RV/L	AIL/RON	BO/LAP	SP/DRK	REFERENCE INFORMATION
(TEJR17)	ARC 11-747 BAS3A B C M F VI V	5.100	.000	.000	25.000	SREF 2.4210 SQ.FT.
(TEJR16)	ARC 11-747 BAS3A B C M F VI V	3.700	.000	.000	25.000	LREF 14.2440 IN.
(TEJR15)	ARC 11-747 BAS3A B C M F VI V	2.200	.000	.000	25.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

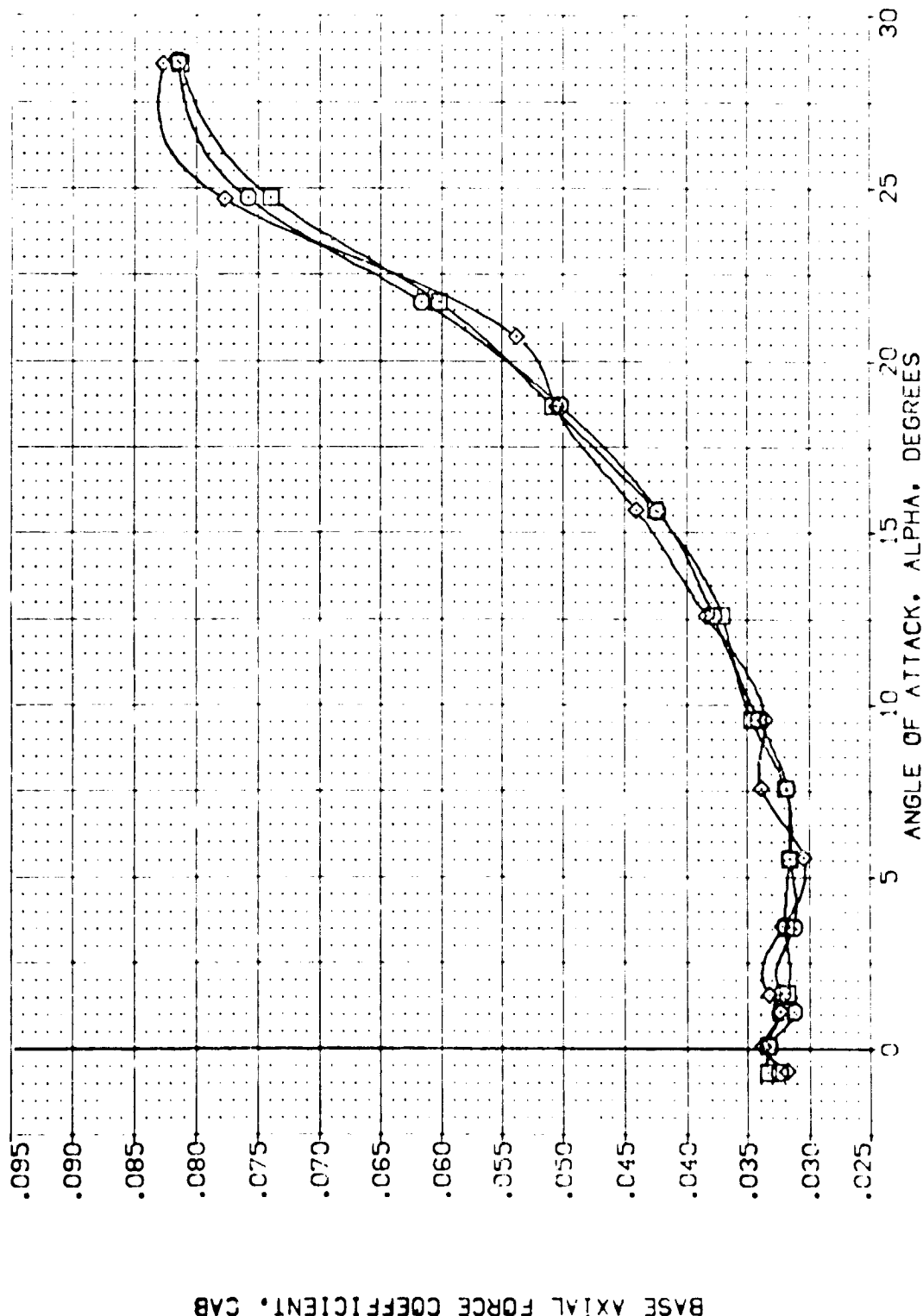


FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RVL	AIRLON	BOFLAP	SPOBRK	REFERENCE INFORMATION
ARC 11-747	DA53A B C H F VI V	5.100	.000	.000	25.000	SREF 2.4210 SQ.FT.
TEAR17)	ARC 11-747	3.700	.000	.000	25.000	LREF 14.2440 IN.
TEAR16)	ARC 11-747	2.200	.000	.000	25.000	EREF 28.1004 IN.
TEAR15)	ARC 11-747					YREF 32.3010 IN.
						YREF 11.2500 IN.
						ZREF .0300 IN.
						SCALE

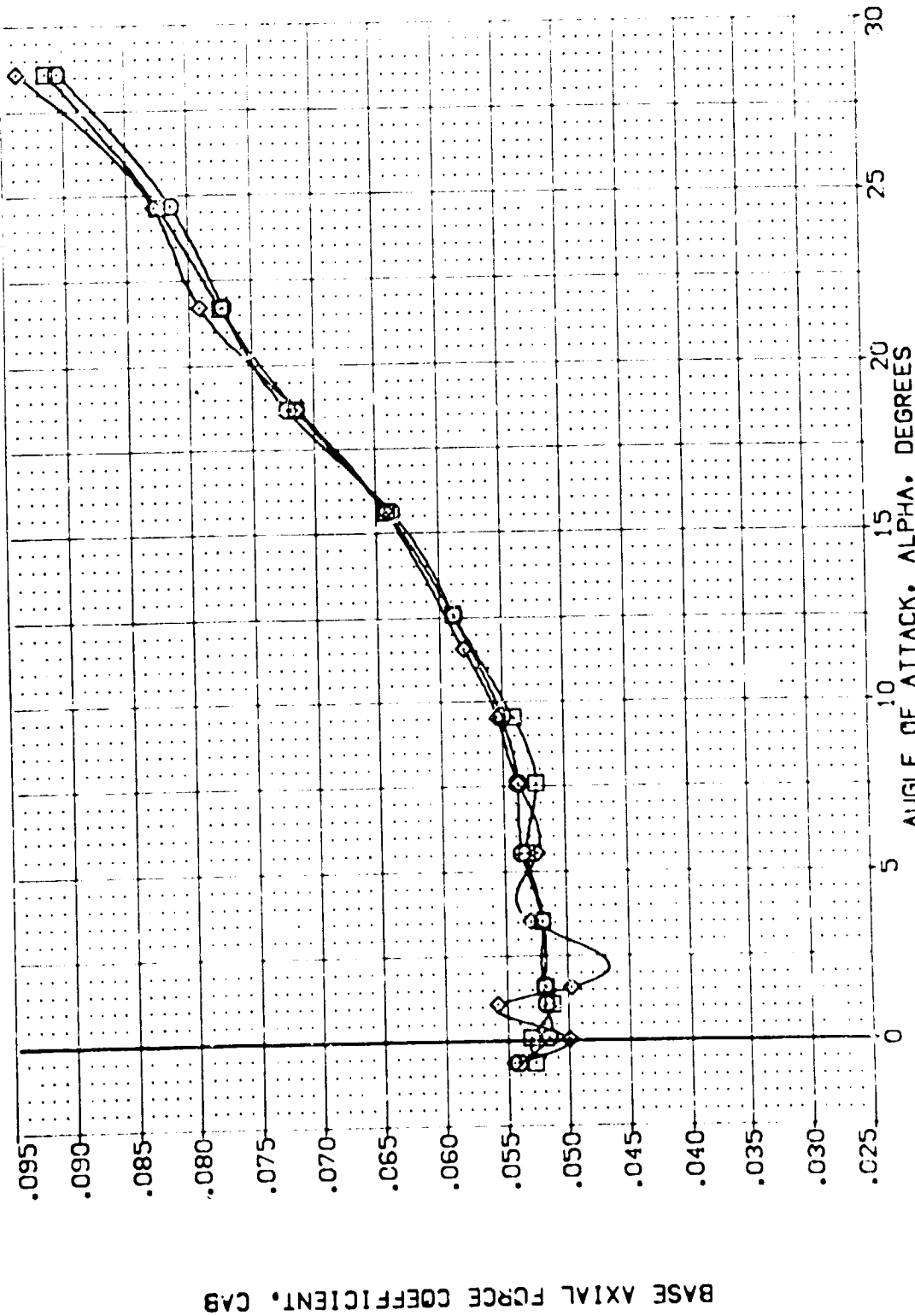


FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

(O)MACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RV/L	AILRON	BOFLAP	SPDRBK	REFERENCE INFORMATION
(TEJR17)	ARC 11-747 DA53A B C M F V1	5.100	.000	.000	25.000	SREF 2.4210 50.FT.
(TEJR16)	ARC 11-747 DA53A B C M F V1	3.700	.000	.000	25.000	LREF 14.2440 IN.
(TEJR15)	ARC 11-747 DA53A B C M F V1	2.200	.000	.000	25.000	BREF 28.1004 IN.
						XTRP 32.3010 IN.
						YTRP .0000 IN.
						ZTRP 11.2500 IN.
						SCALE .0300

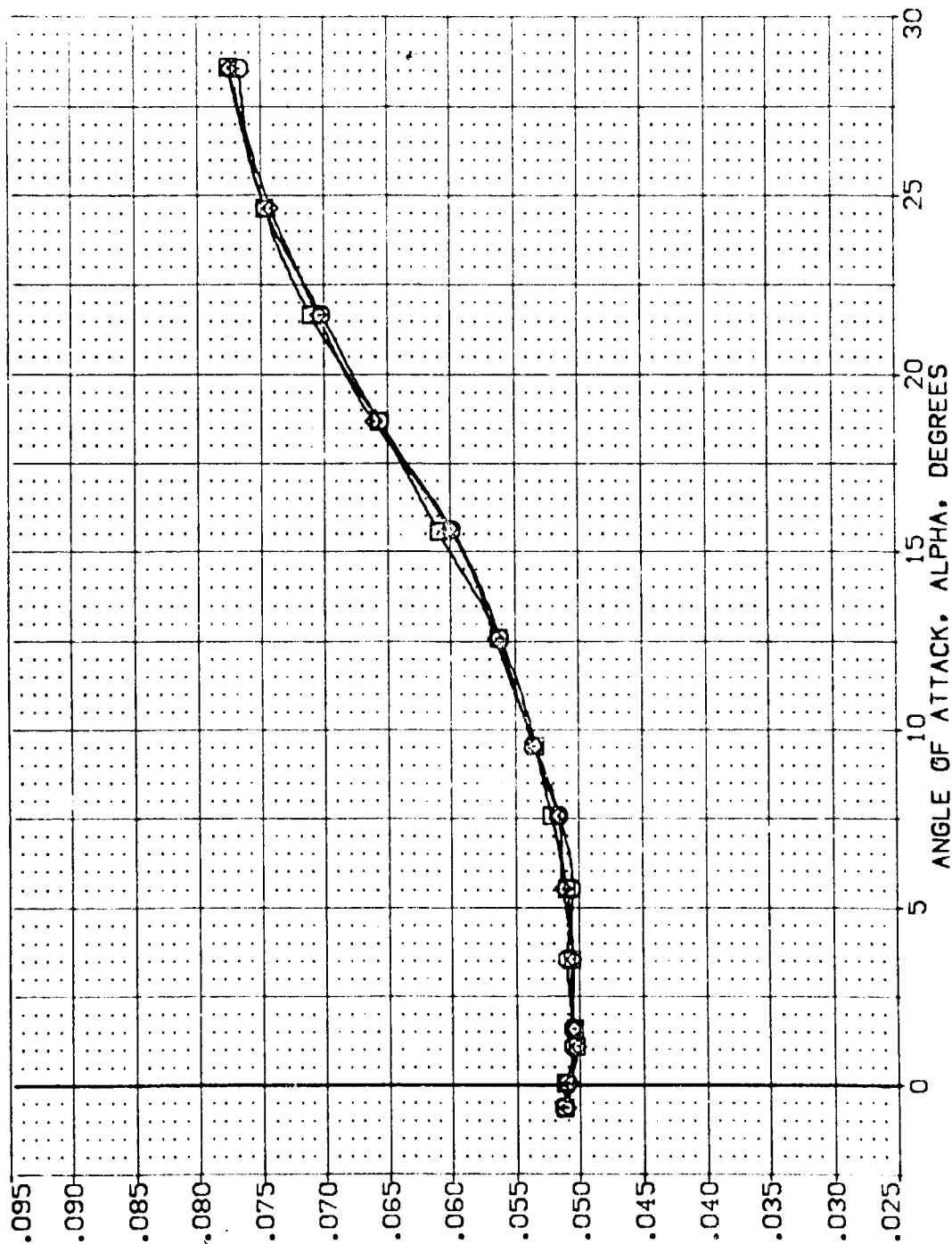


FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

(E)MACH = 1.20



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RV/L	AIRLON	BD/LAP	SFOBRK	REFERENCE INFORMATION
(TLR17)	ARC 11-747 DAS3A B C M F VI V	5.100	.000	.000	25.000	SREF 2.4210 SQ.FT.
(TLR16)	ARC 11-747 DAS3A B C M F VI V	3.700	.000	.000	25.000	LREF 14.2440 IN.
(TLR15)	ARC 11-747 DAS3A B C M F VI V	2.200	.000	.000	25.000	BREF 28.1004 IN.
						YREF 32.3010 IN.
						ZREF 11.2500 IN.
						SCALE .0300

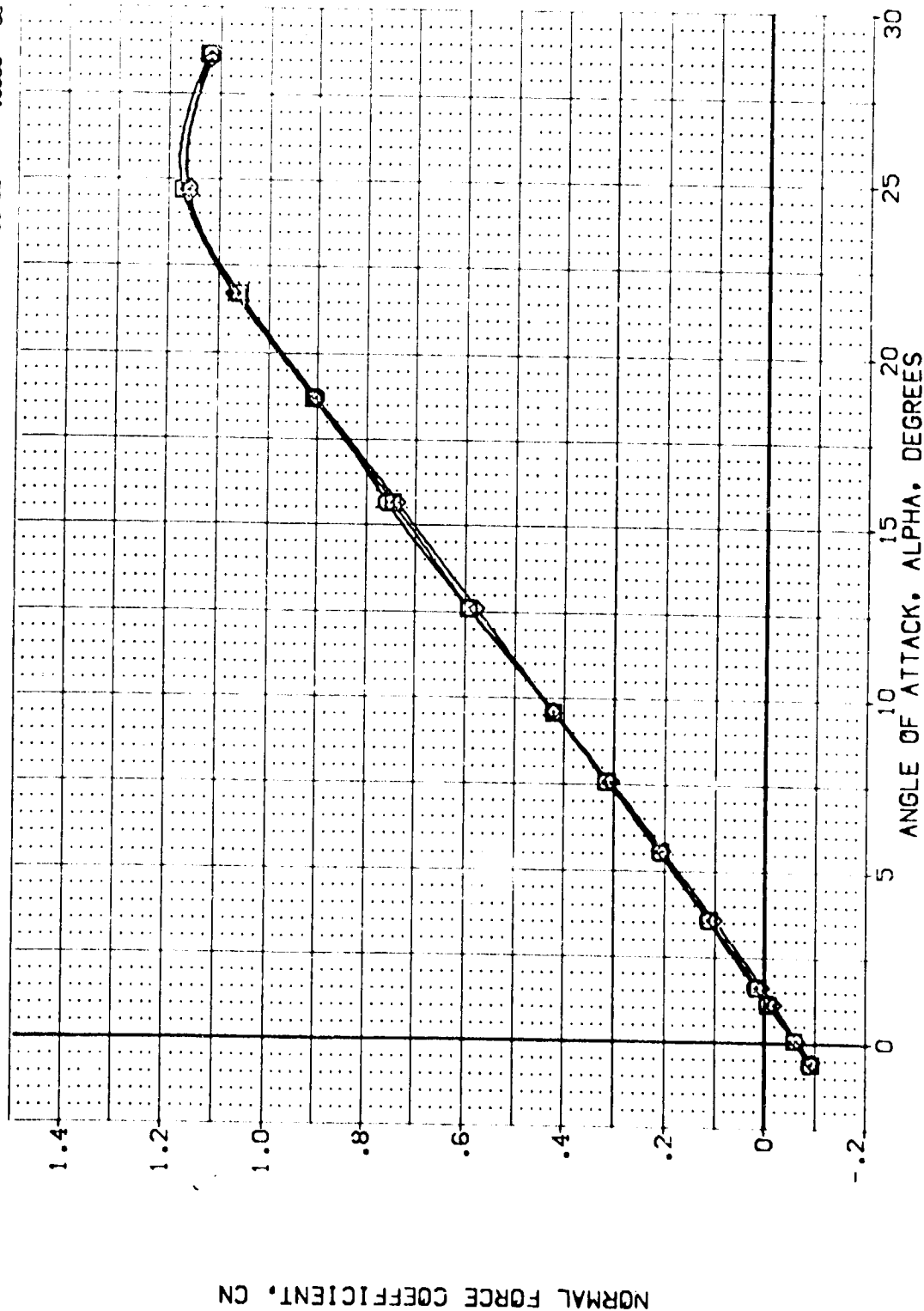
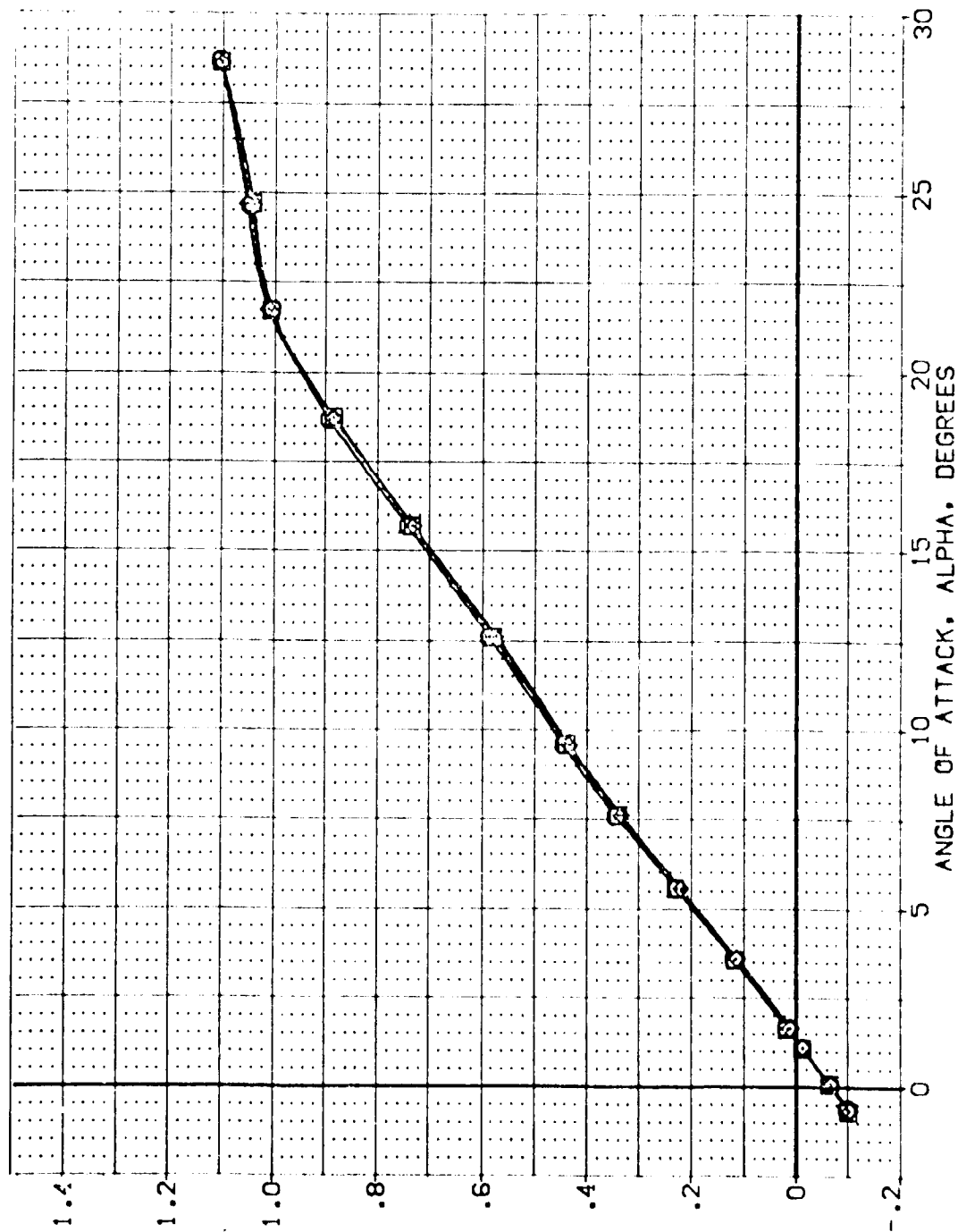


FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

(A)MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RNVL	AIRLON	BDLAP	SPDRK	REFERENCE INFORMATION
{TEJR17}	ARC 11-747 OAS3A B C M F VI V	5.100	.000	.000	25.000	SREF 2.4210 SQ.FT.
{TEJR16}	ARC 11-747 OAS3A B C M F VI V	3.700	.000	.000	25.000	LREF 14.2440 IN.
{TEJR15}	ARC 11-747 OAS3A B C M F VI V	2.200	.000	.000	25.000	BREF 28.1004 IN.
						XMPP 32.3010 IN.
						YMPP .0000 IN.
						ZMPP 11.2500 IN.
						SCALE .0300



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FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

(B)MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RV/L	AIRLON	BOFLAP	SPDRK	REFERENCE INFORMATION
(TEJR17)	ARC 11-747 OAS3A B C H F VI V	5.100	.000	.000	25.000	SREF 2.4210 SQ.FT.
(TEJR16)	ARC 11-747 OAS3A B C H F VI V	3.700	.000	.000	25.000	LREF 14.2440 IN.
(TEJR15)	ARC 11-747 OAS3A B C H F VI V	2.200	.000	.000	25.000	BREF 28.1004 IN.
						YMRP 32.3010 IN.
						ZMRP .0000 IN.
						SCALE 11.2500 IN.

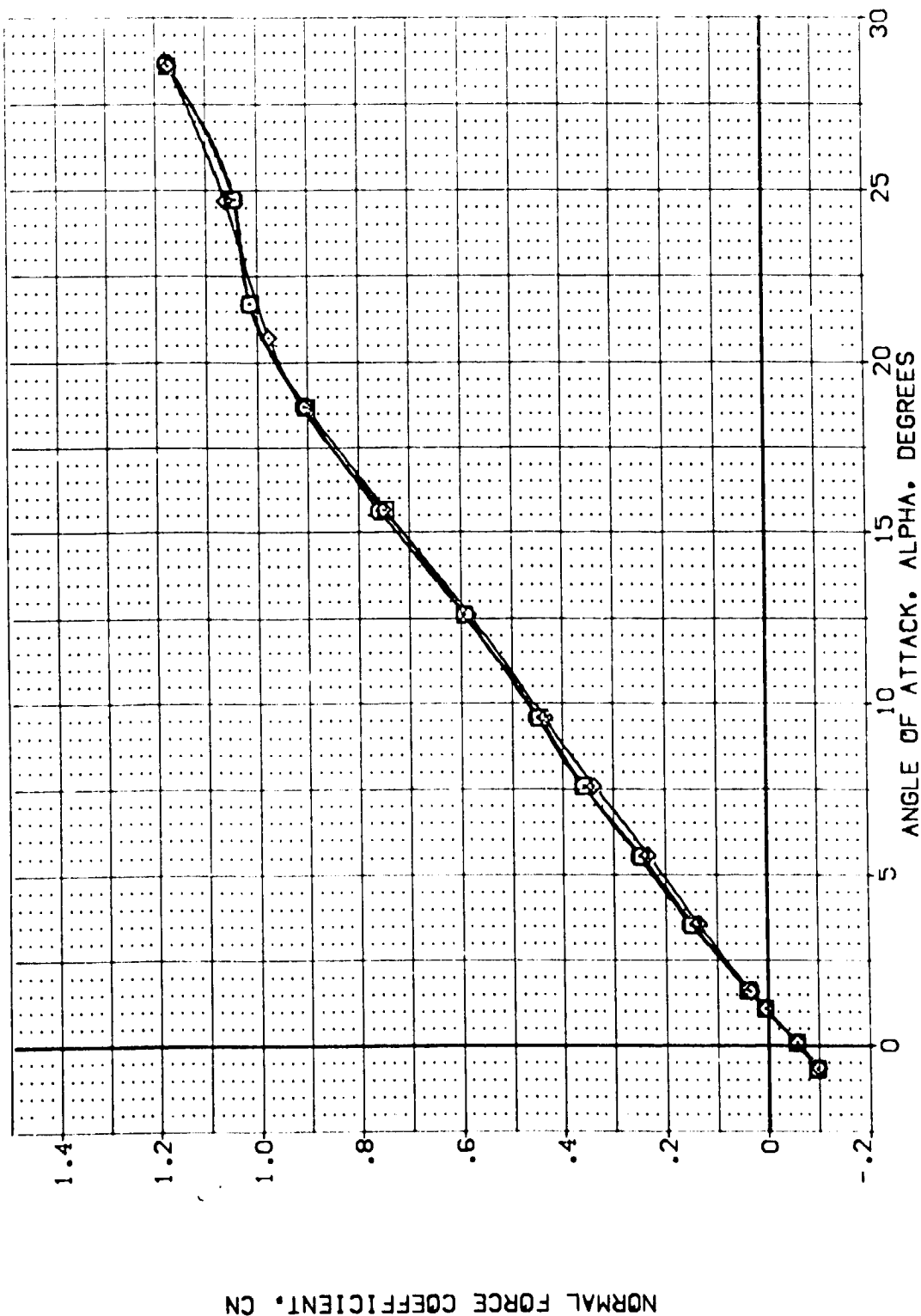


FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

(C)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RV/L	ALL/ON	BD/LAP	SP/BRK	REFERENCE INFORMATION
[TEJR17]	ARC 11-747 OAS3A B C M F V1 V	5.100	.000	.000	25.000	SREF 2.4210 SQ.FT.
[TEJR16]	ARC 11-747 OAS3A B C M F V1 V	3.700	.000	.000	25.000	LREF 14.2440 IN.
[TEJR15]	ARC 11-747 OAS3A B C M F V1 V	2.200	.000	.000	25.000	BREF 28.1004 IN.
						XMIRP 32.3010 IN.
						YMIRP .0000 IN.
						ZMIRP 11.2500 IN.
						SCALE .0300

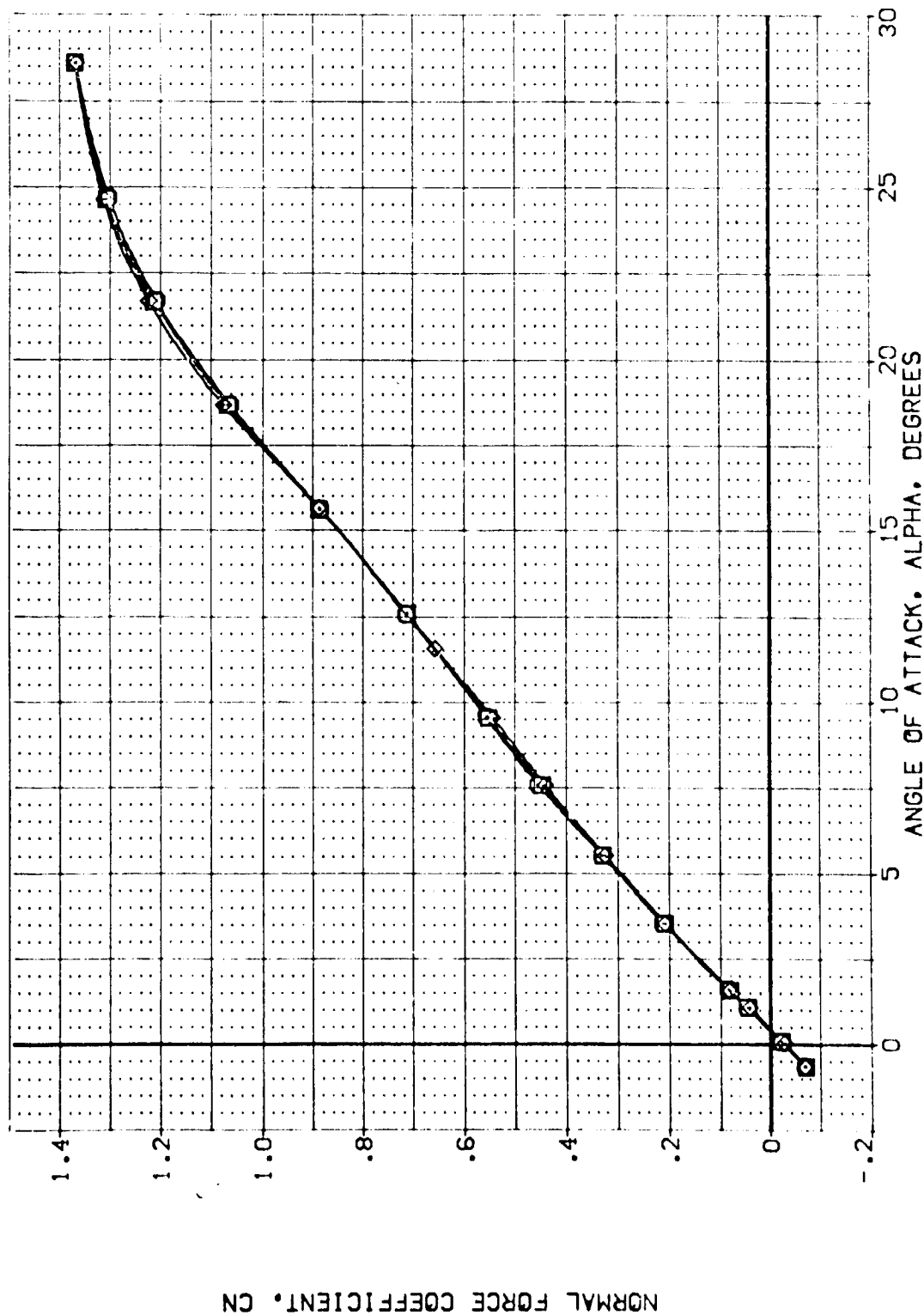


FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

(O)MACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RV/L	ATL/RON	ED/LAP	SP/BRK	REFERENCE INFORMATION
{TEJR17}	ARC 11-747 DA53A B C M F VI V	5.100	.000	.000	25.000	SREF 2.4210 SQ.FT.
{TEJR16}	ARC 11-747 DA53A B C M F VI V	3.700	.000	.000	25.000	LREF 14.2440 IN.
{TEJR15}	ARC 11-747 DA53A B C M F VI V	2.200	.000	.000	25.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP 11.0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300 SCALE

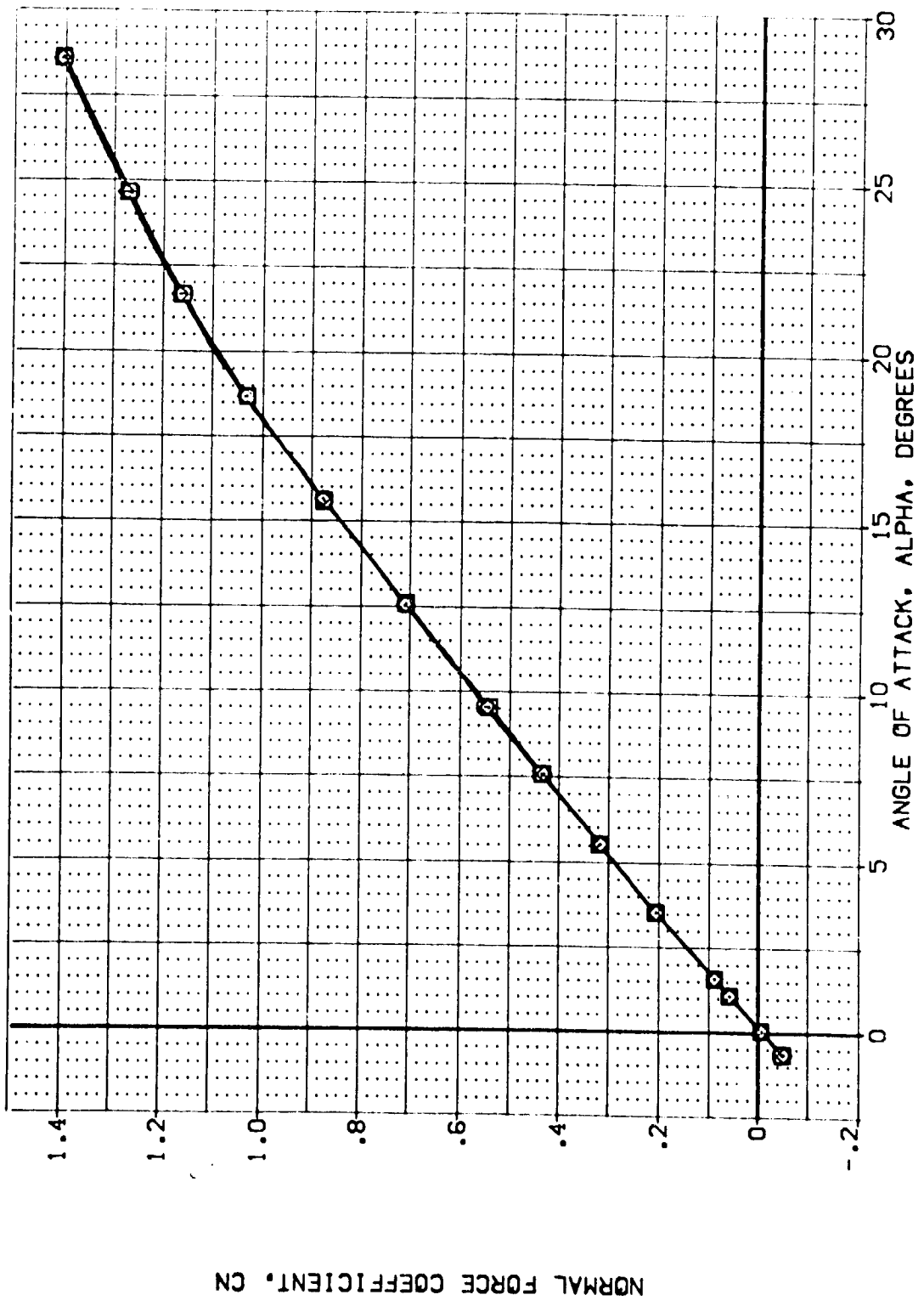


FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

(E)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RNVL	AILRON	BDFLAP	SPDRBK	REFERENCE INFORMATION
(TEJR17)	ARC 11-747 OAS3A B C M F VI V	5.100	.000	.000	25.000	SREF 2.4210 SQ.FT.
(TEJR16)	ARC 11-747 OAS3A B C M F VI V	3.700	.000	.000	25.000	LREF 14.2440 IN.
(TEJR15)	ARC 11-747 OAS3A B C M F VI V	2.200	.000	.000	25.000	BREF 28.1004 IN.
						XMED 32.3010 IN.
						YMED .0000 IN.
						ZMED 11.2500 IN.
						SCALE .0000

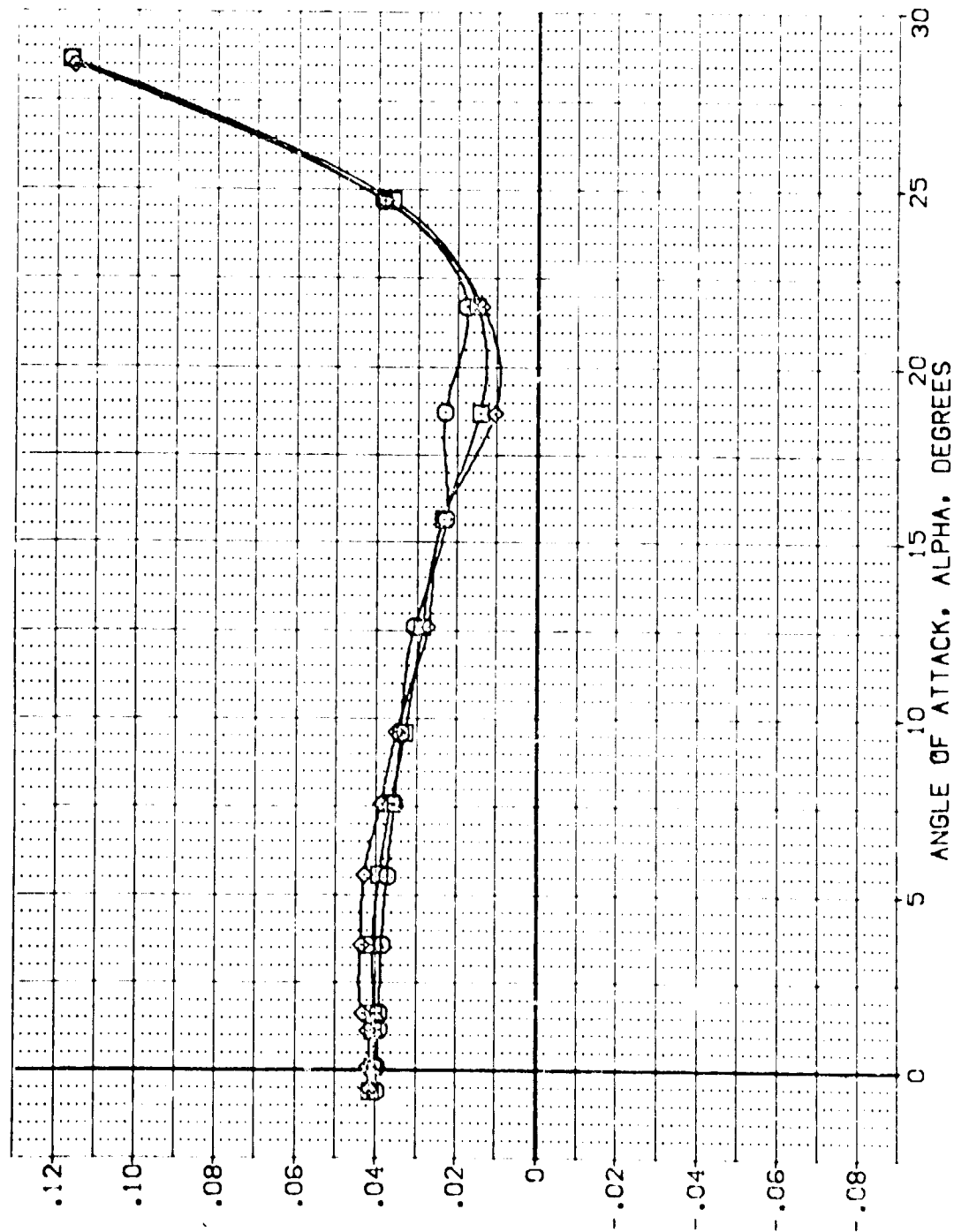


FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

(A)MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	HIGH RV/L	LOW RV/L	RV/L	AIRLON	BOFLAP	SPORRY	REFERENCE INFORMATION
(TEJR17)	ARC 11-747 OAS3A B C M F VI	Y		5.100	.000	.000	25.000	SREF 2.4210 SQ.FT.
(TEJR16)	ARC 11-747 OAS3A B C M F VI	Y		3.700	.000	.000	25.000	LREF 14.2440 IN.
(TEJR15)	ARC 11-747 OAS3A B C M F VI	Y		2.200	.000	.000	25.000	BREF 28.1004 IN.
								XREF 32.3010 IN.
								YREF .0000 IN.
								ZREF 11.2500 IN.
								SCALE .0000 IN.

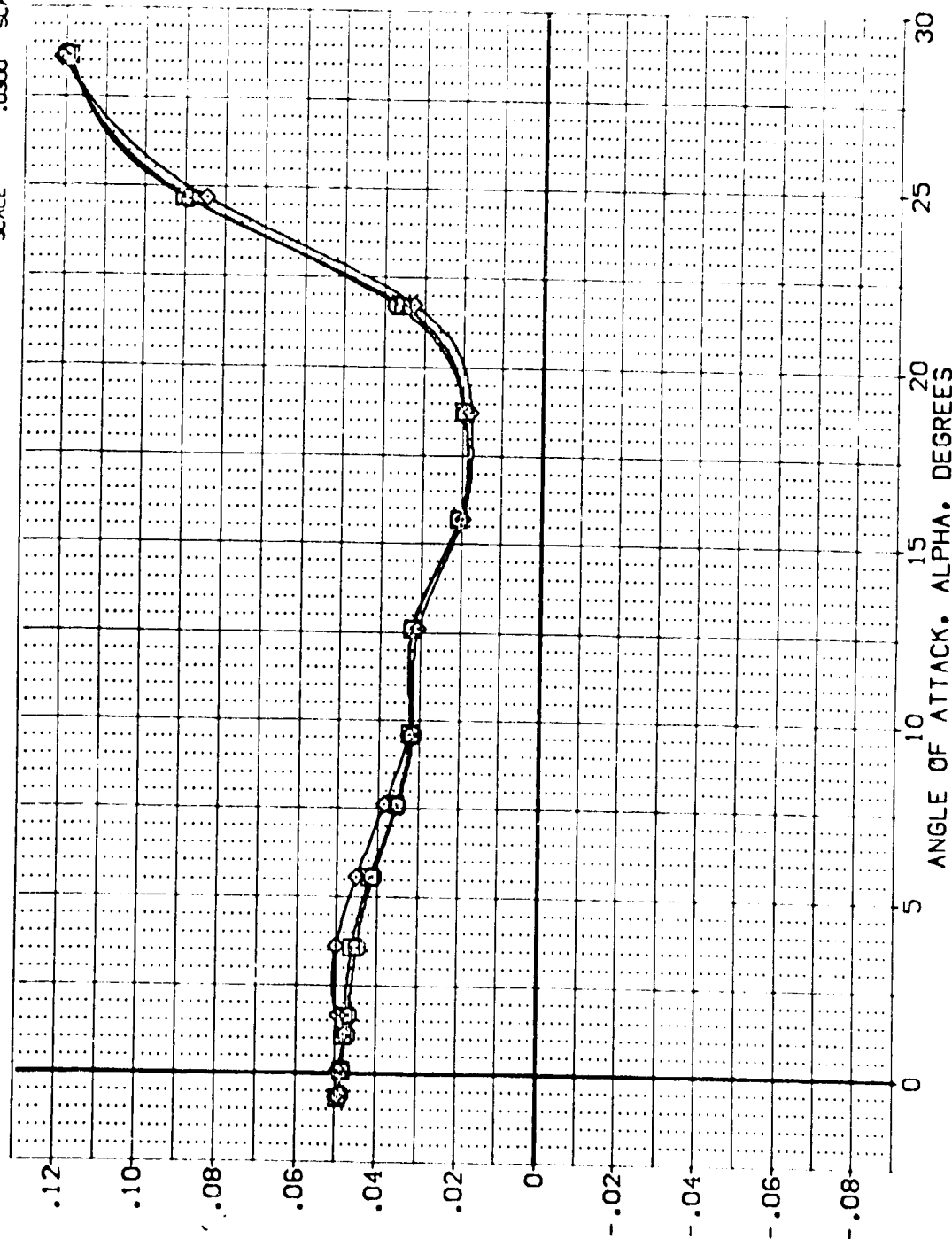


FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

(B)MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RV/L	AT/LRN	BD/LAP	SP/DBRK	REFERENCE INFORMATION
(TEJR17)	ARC 11-747 OA53A B C M F VI V	5.100	.000	.000	25.000	SREF 2.4210 SQ.FT.
(TEJR16)	ARC 11-747 OA53A B C M F VI V	3.700	.000	.000	25.000	LREF 14.2440 IN.
(TEJR15)	ARC 11-747 OA53A B C M F VI V	2.200	.000	.000	25.000	BREF 28.1004 IN.
						XMREF 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

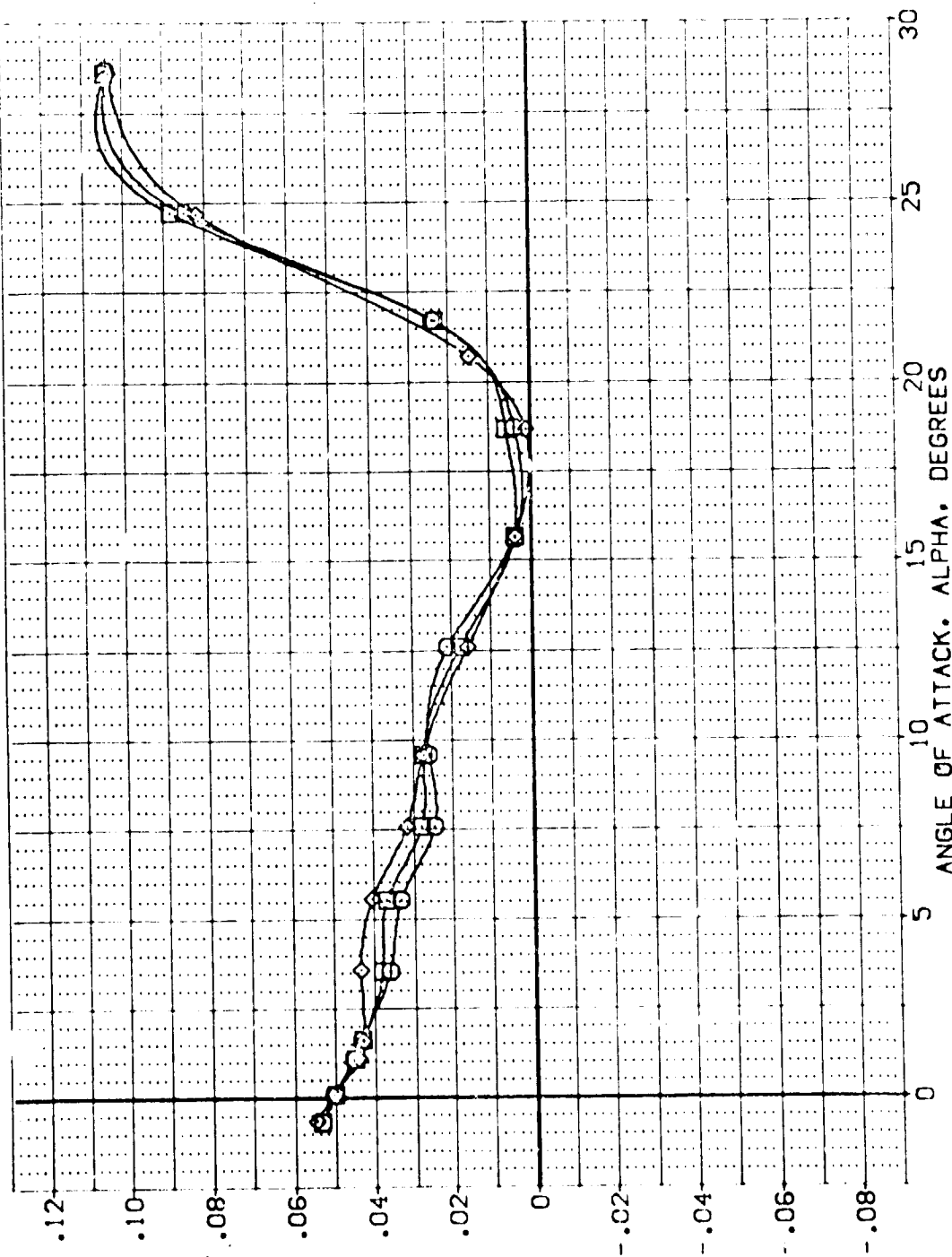


FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

(C)MACH = .90



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RVL	AIRLON	BDELAP	SFOBRK	REFERENCE INFORMATION
(TEJRI7)	ARC 11-747 0A53A B C M F V I V	5.100	.000	.000	25.000	SREF 2.4210 50.0 FT.
(TEJRI6)	ARC 11-747 0A53A B C M F V I V	3.700	.000	.000	25.000	LREF 14.2440 IN.
(TEJRI5)	ARC 11-747 0A53A B C M F V I V	2.200	.000	.000	25.000	BREF 28.1004 IN.
						YMRP 32.3010 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

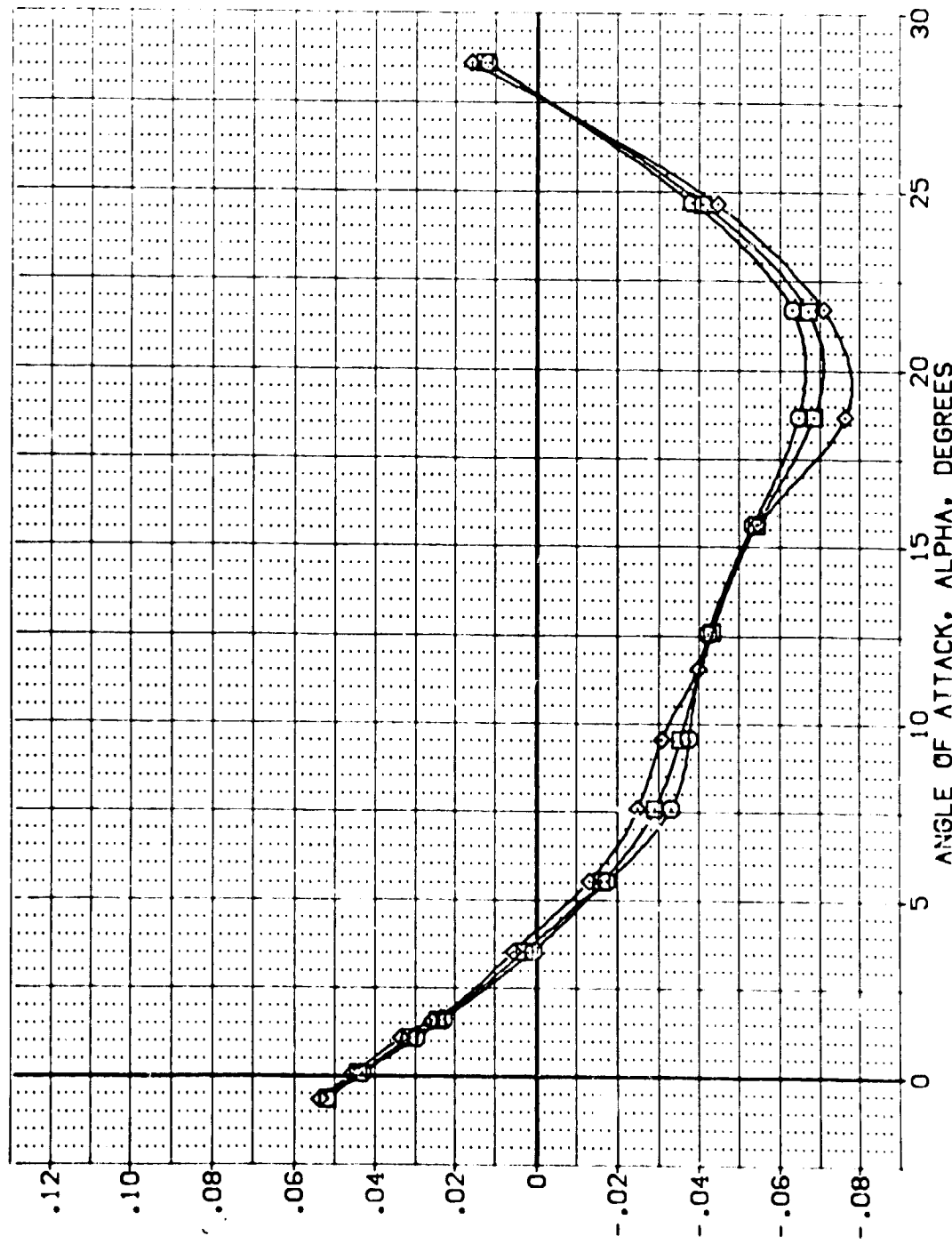


FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

(MACH = 1.05)

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RVL	AILRON	BOFLAP	SPDRK	REFERENCE INFORMATION
{TEJR17}	ARC 11-747 DASSA B C M F VI V	5.100	.000	.000	25.000	SREF 2.4210 SQ.FT.
{TEJR16}	ARC 11-747 DASSA B C M F VI V	3.700	.000	.000	25.000	LREF 14.2440 IN.
{TEJR15}	ARC 11-747 DASSA B C M F VI V	2.200	.000	.000	25.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

PITCHING MOMENT COEFFICIENT (FWD C.G.), CLMFW

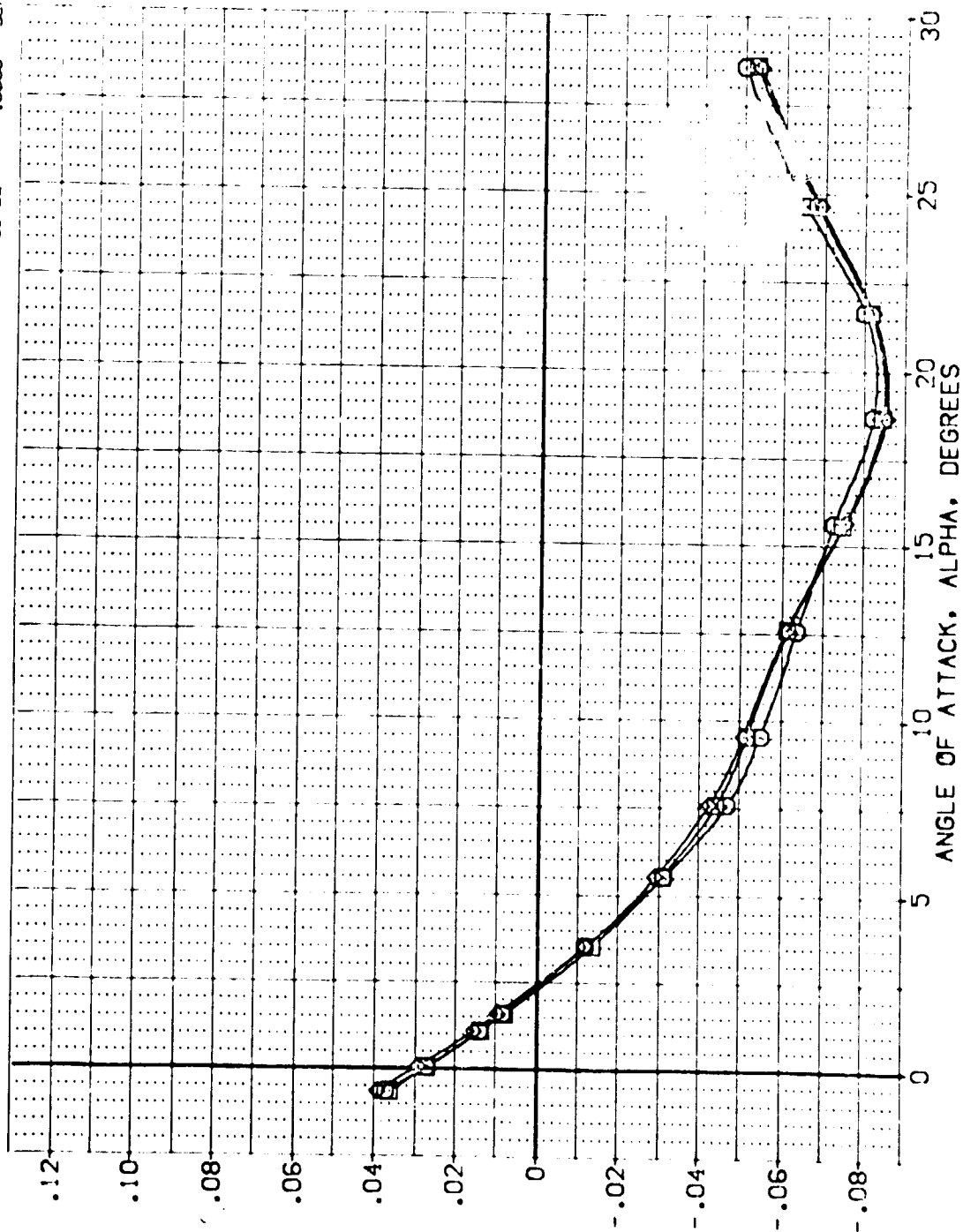


FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

(MACH = 1.20)

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RV/L	ALLREN	BOFLAP	SPDPRK	REFERENCE INFORMATION
(TEJRI7)	ARC 11-747 OAS3A B C M F VI V	5.100	.000	.000	25.000	SRCF 2.4210 SC.F.T.
(TEJRI6)	ARC 11-747 OAS3A B C M F VI V	3.700	.000	.000	25.000	LREF 14.2440 IN.
(TEJRI5)	ARC 11-747 OAS3A B C M F VI V	2.200	.000	.000	25.000	BREF 28.1004 IN.
						VMOP 32.3010 IN.
						VMOP .0000 IN.
						ZMOP 11.2500 IN.
						SCALE .0300 SCALE

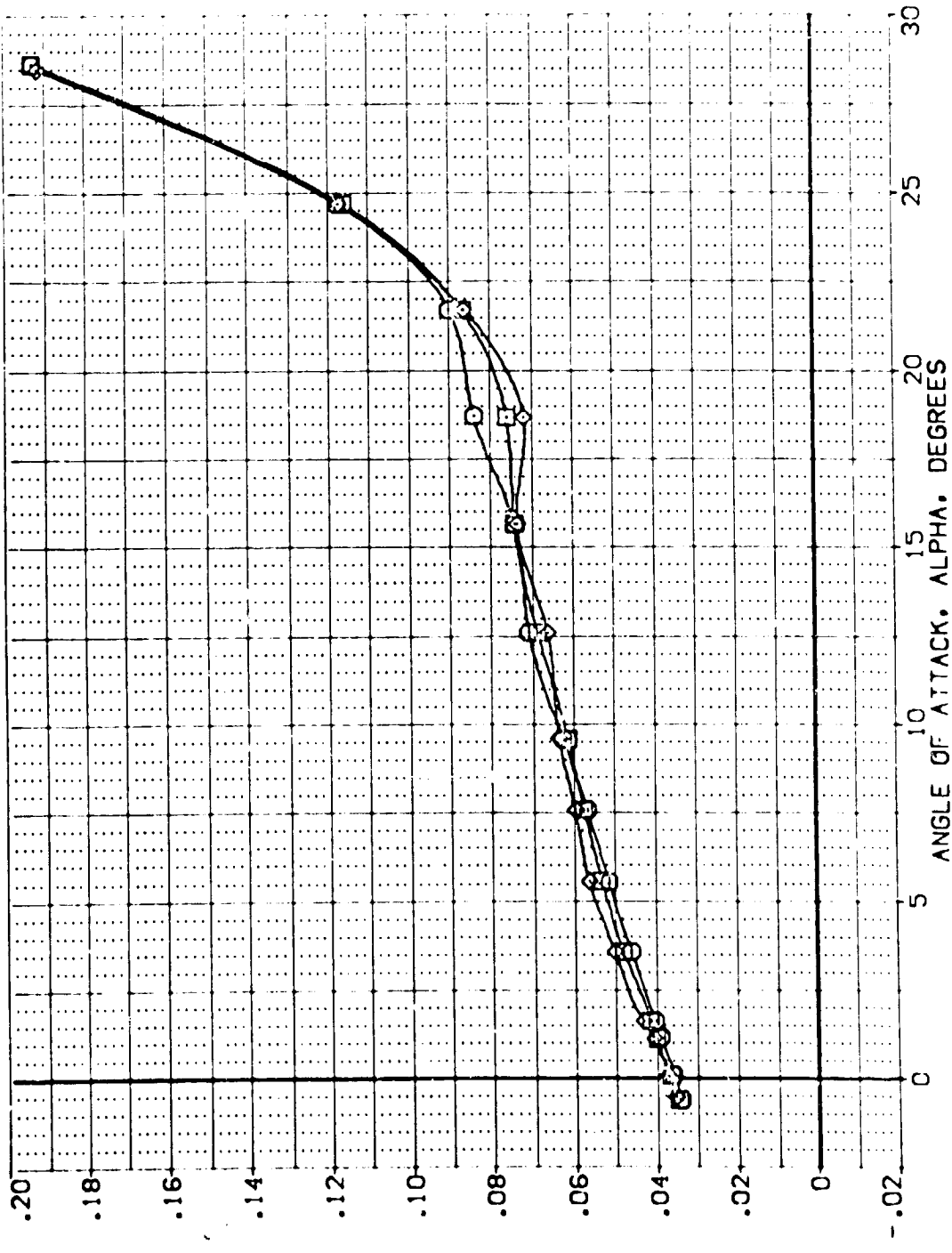


FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

(A)MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RV/L	AIR/ION	BO/LAP	SP/BRK	REFERENCE INFORMATION
(TEJ-17)	ARC 11-747 D453A B C M F V1	5.100	.000	.000	25.000	SREF 2.4210 SQ.FT.
(TEJ-16)	ARC 11-747 D453A B C M F V1	3.700	.000	.000	25.000	LREF 14.2440
(TEJ-15)	ARC 11-747 D453A B C M F V1	2.200	.000	.000	25.000	BREF 28.1004
						XREF 32.3010
						YREF .0000
						ZREF .0000
						SCALE 11.2500
						SCALE .0300

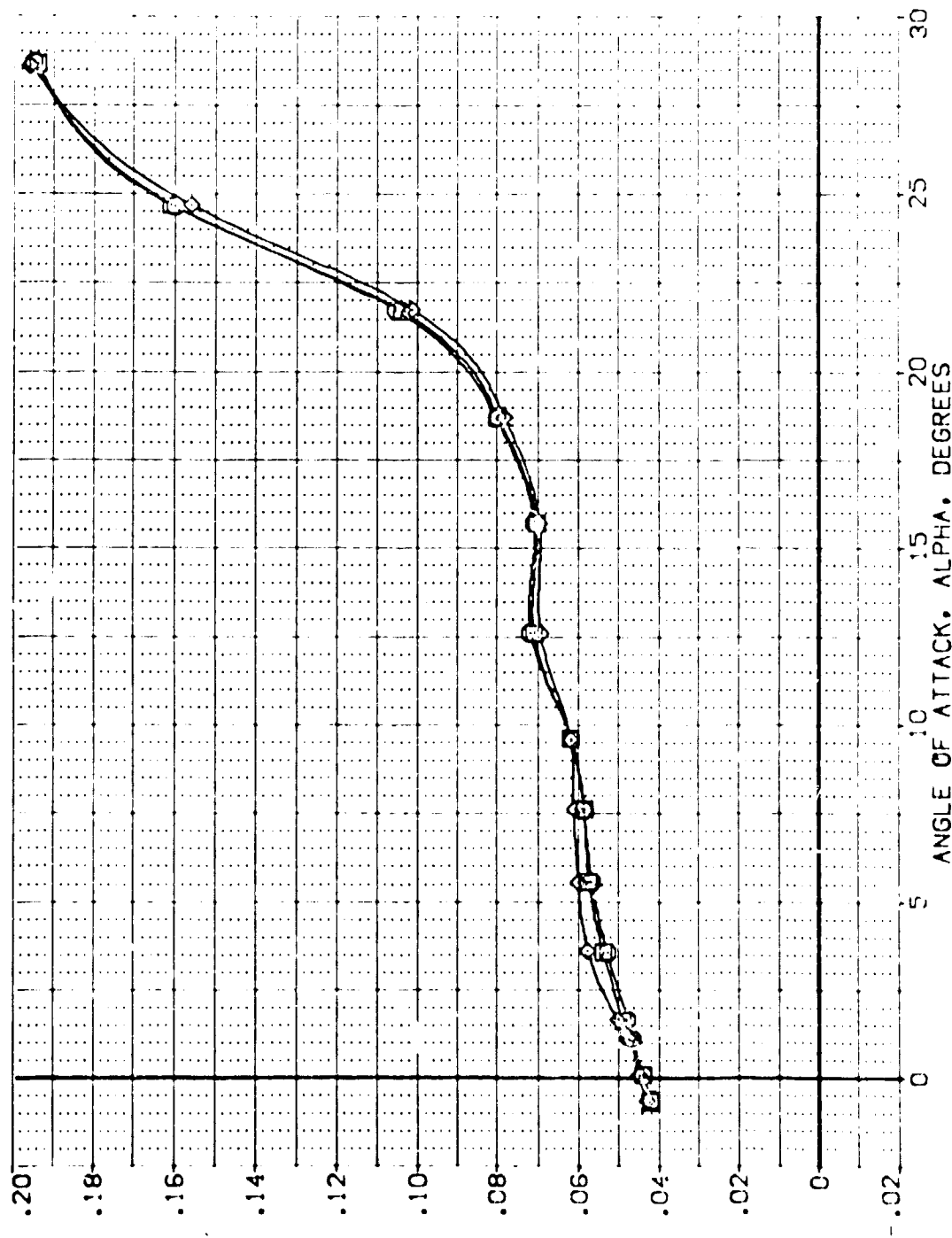


FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

(B)MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RV/L	AILRON	BD FLAP	SPOBRK	REFERENCE INFORMATION
(TEJR17)	ARC 11-747 D453A B C M F V1 V	5.100	.000	.000	25.000	SREF 2.4210 SQ.FT.
(TEJR16)	ARC 11-747 D453A B C M F V1 V	3.700	.000	.000	25.000	LREF 14.2440 IN.
(TEJR15)	ARC 11-747 D453A B C M F V1 V	2.200	.000	.000	25.000	BREF 28.1004 IN.
						XMRP 32.5010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

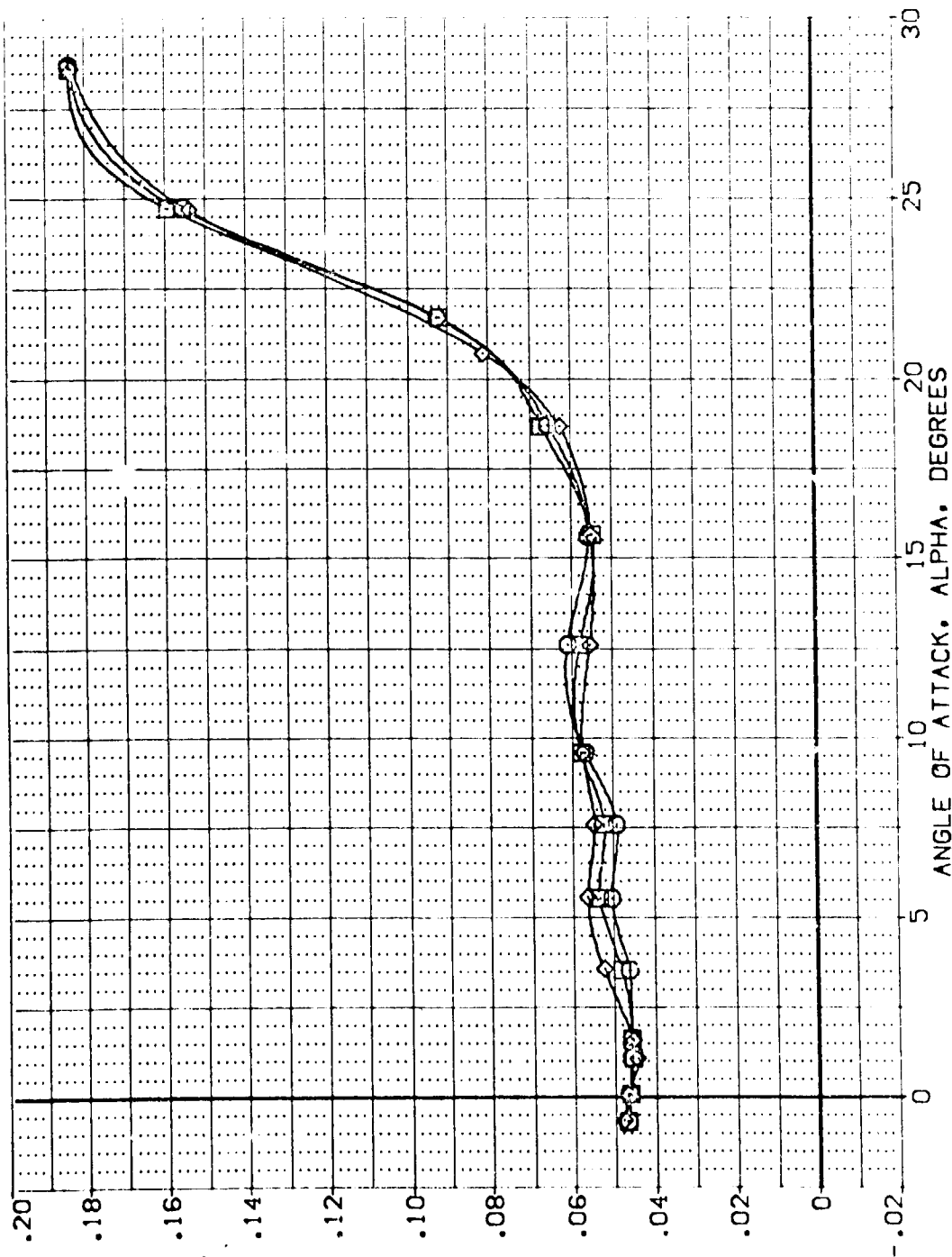


FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

(CJ)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RV/L	AIRLON	BDFLAP	SPDRBY	REFERENCE INFORMATION
{TEJRI.2}	ARC 11-747 GAS3A B C M F VI	5.100	.000	.000	25.000	SREF 2.4210 SQ.FT.
{TEJRI.6}	ARC 11-747 GAS3A B C M F VI	3.700	.000	.000	25.000	LREF 14.2440 IN.
{TEJRI.5}	ARC 11-747 GAS3A B C M F VI	2.200	.000	.000	25.000	BREF 28.1004 IN.
						XTRP 32.3010 IN.
						YTRP .0000 IN.
						ZTRP 11.2500 IN.
						SCALE .0300

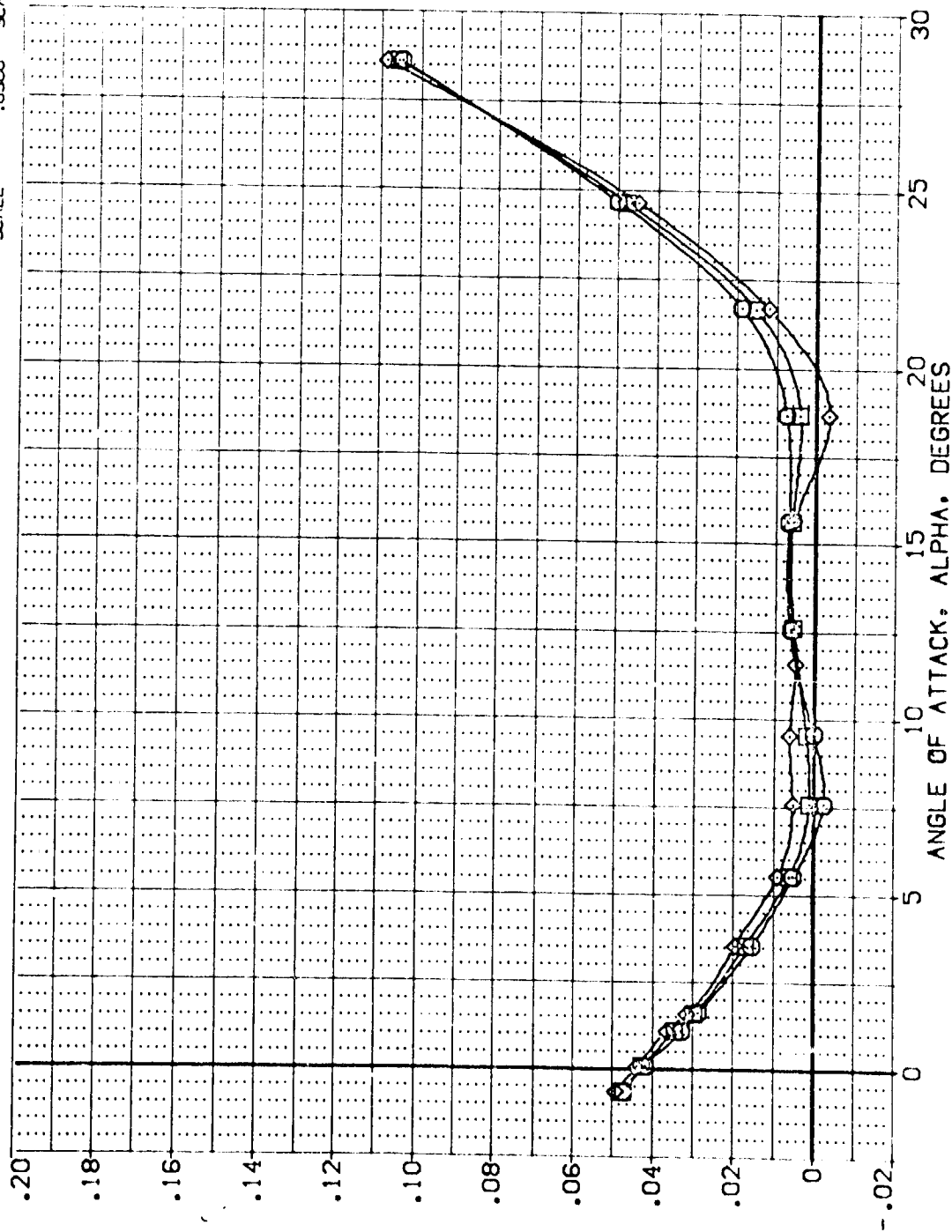


FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

(D)MACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RVL	AILRON	BDFLAP	SPOBRK	REFERENCE INFORMATION
{TEJR17}	ARC 11-747 CAS3A B C M F VI	5.100	.000	.000	25.000	SREF 2.4210 SQ.FT.
{TEJR16}	ARC 11-747 CAS3A B C M F VI	3.700	.000	.000	25.000	LREF 14.2440 IN.
{TEJR15}	ARC 11-747 CAS3A B C M F VI	2.200	.000	.000	25.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE 0.000

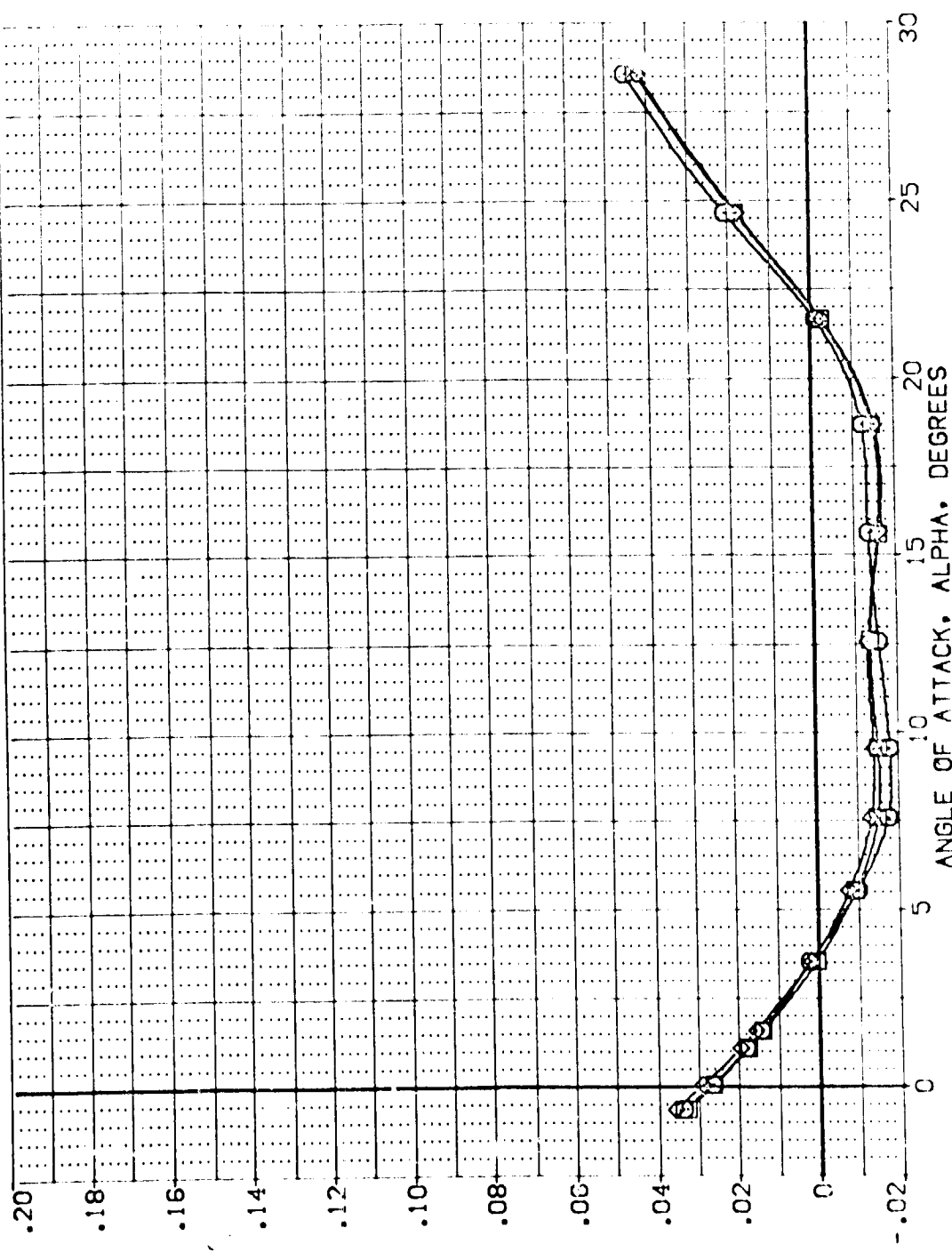


FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

CEJMAC = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RV/L	AIL/ON	BD/LAP	SPO/ERK	REFERENCE INFORMATION
ARC 11-747	QAS3A B C M F VI	5.100	.000	.000	25.000	SREF 2.4210 SQ.FT.
ARC 11-747	QAS3A B C M F VI	3.700	.000	.000	25.000	LREF 14.2440 IN.
ARC 11-747	QAS3A B C M F VI	2.200	.000	.000	25.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

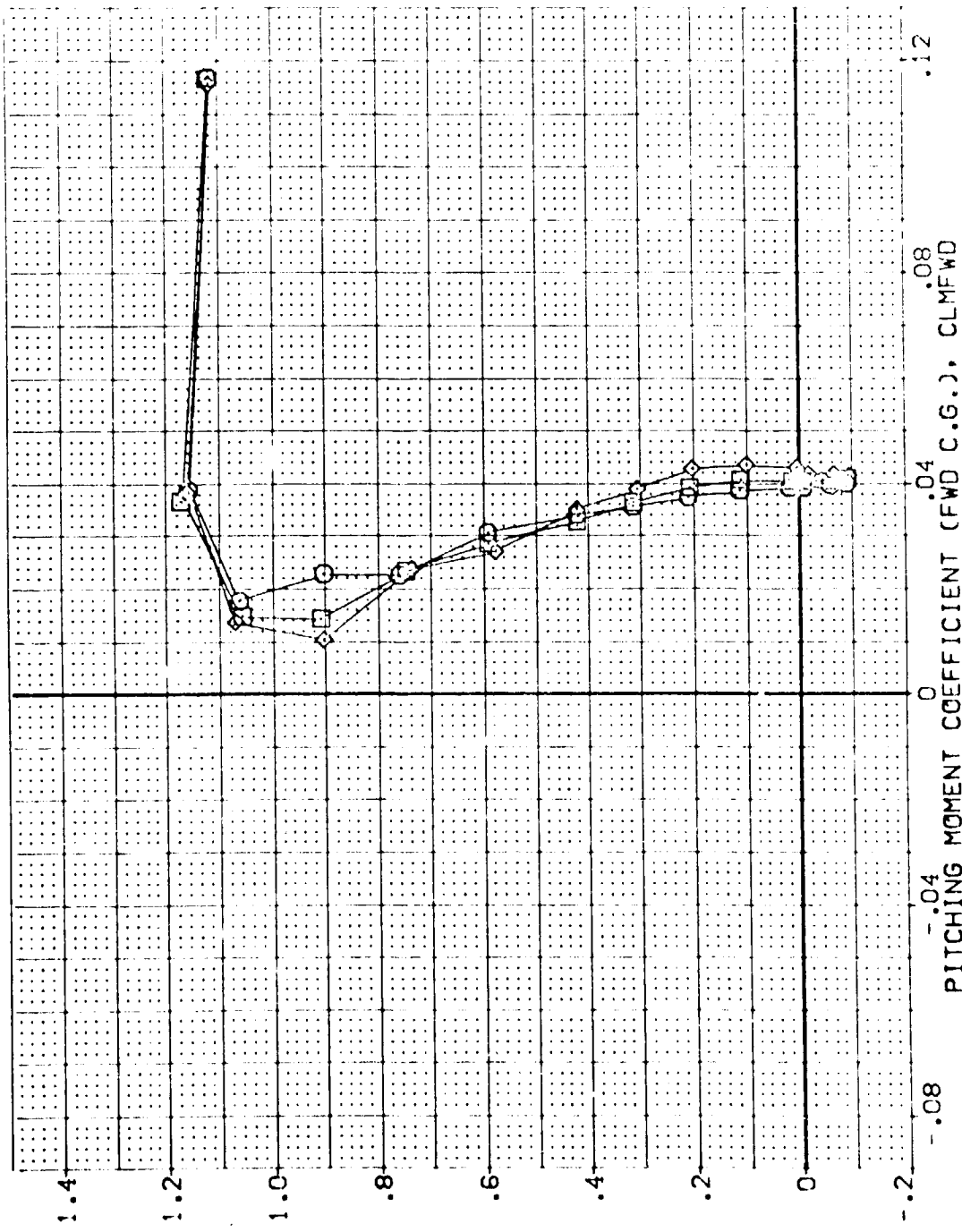


FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

(A)MACH = .60



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RV/L	AIRLON	BDF/LAP	SPOBRK	REFE ENCE INFORMATION
[TEJR(7)]	ARC 11-747 OAS3A B C M F V	5.100	.000	.000	25.000	SREF 2.4210 SQ.FT.
[TEJR(6)]	ARC 11-747 OAS3A B C M F V	3.700	.000	.000	25.000	LREF 14.2440 IN.
[TEJR(5)]	ARC 11-747 OAS3A B C M F V	2.200	.000	.000	25.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP 11.2500 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

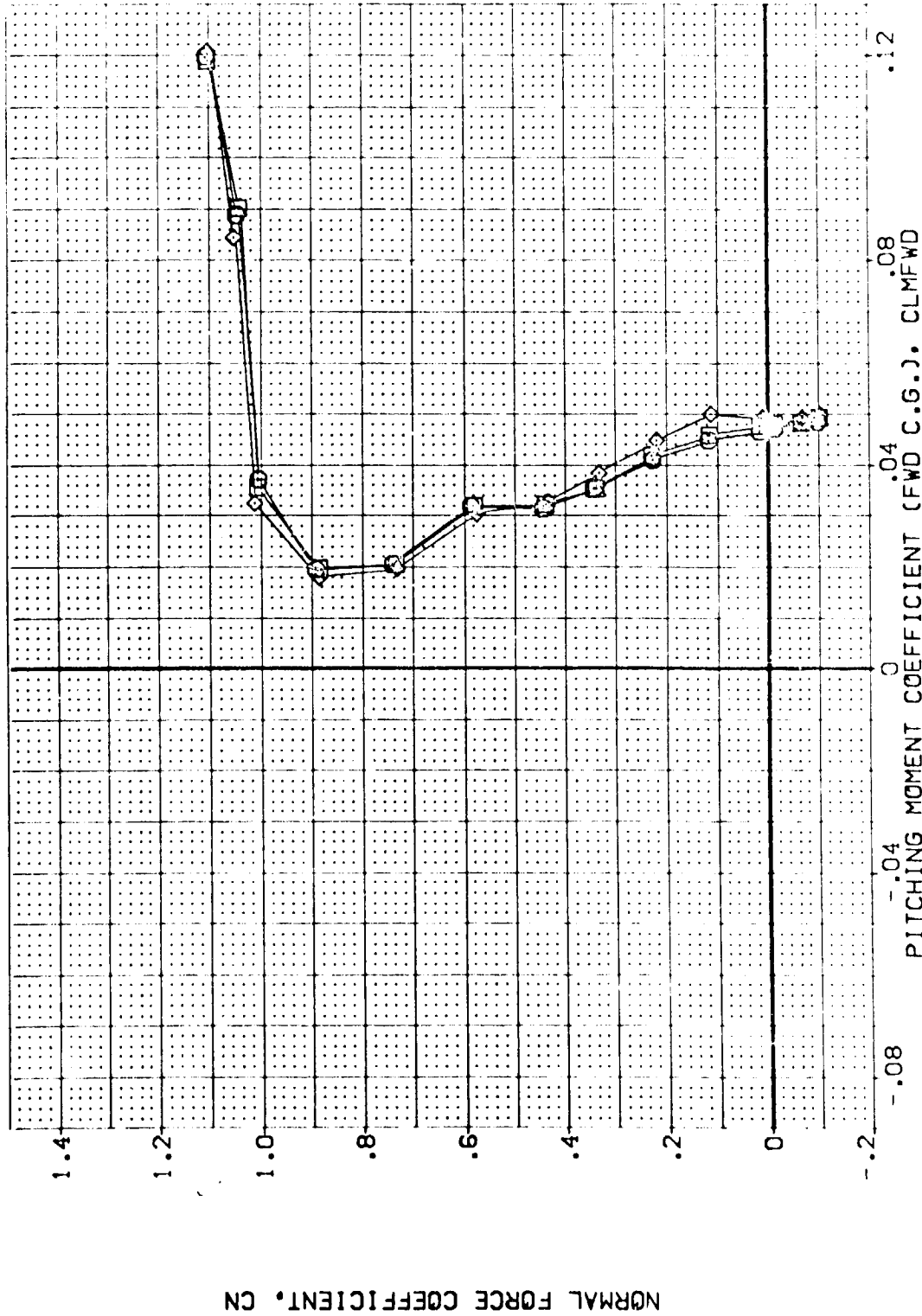
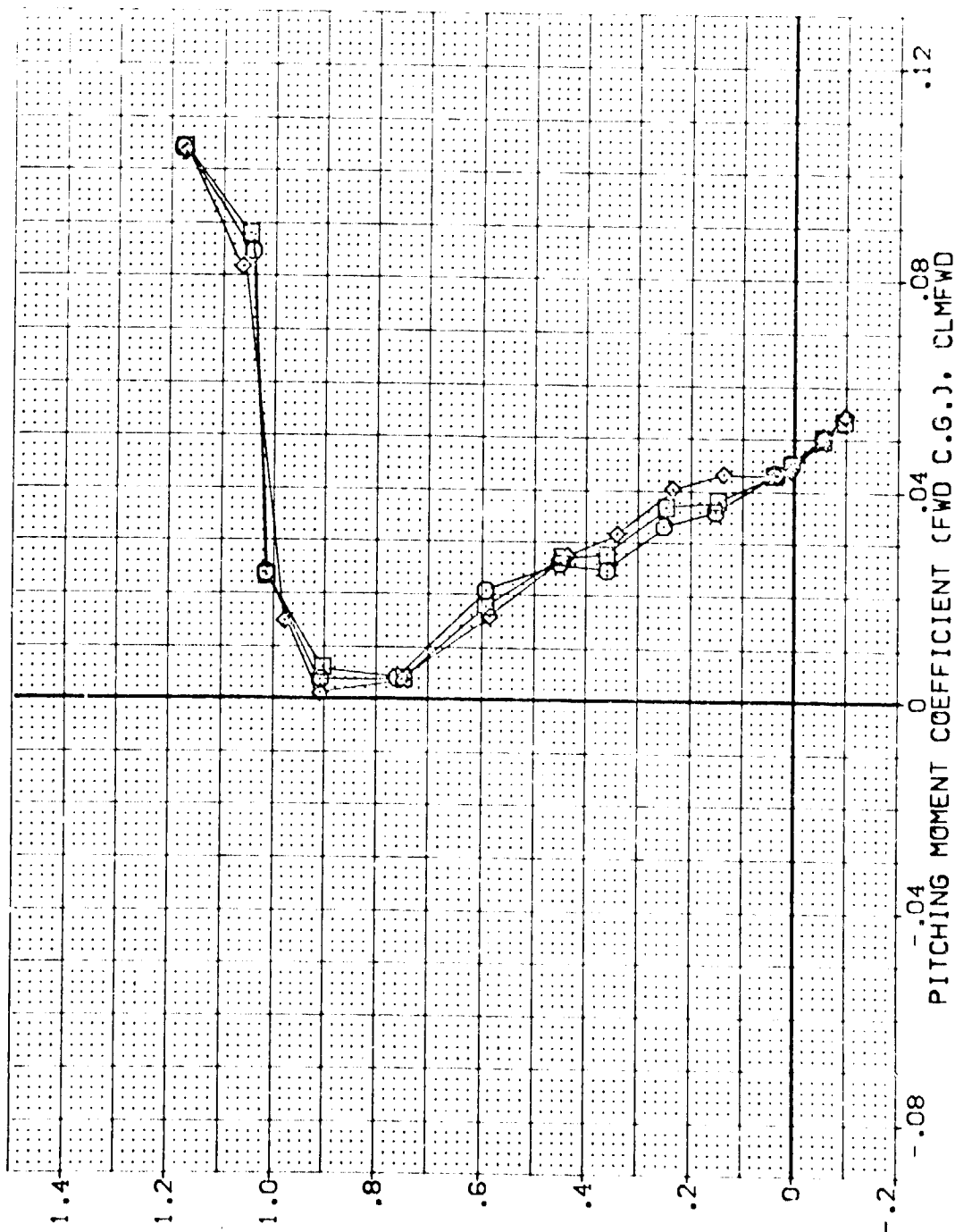


FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

(B)MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RVL	AILRON	BOFLAP	SPOBRK	REFERENCE INFORMATION
(TEPR17)	ARC 11-747 DASSA B C M F VI	5.100	.000	.000	25.000	SREF 2.4210 SQ.FT.
(TEPR16)	ARC 11-747 DASSA B C M F VI	3.700	.000	.000	25.000	LREF 14.2440
(TEPR15)	ARC 11-747 DASSA B C M F VI	2.200	.000	.000	25.000	BREF 28.1004
						XREF 32.3010
						YREF 11.2500
						ZREF 11.2500
						SCALE .0000



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FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

(C)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	HIGH RV/L	LOW RV/L	RV/L	AILRON	BO/LAP	SP/BRK	REFERENCE INFORMATION
ARC 11-747	OA53A B C H F VI	V	V	5.100	.000	.000	25.000	SREF 2.4210 SQ.FT.
ARC 11-747	OA53A B C H F VI	V	V	3.700	.000	.000	25.000	LREF 14.2440 IN.
ARC 11-747	OA53A B C H F VI	V	V	2.200	.000	.000	25.000	BREF 28.1004 IN.
								XMPD 32.3010 IN.
								ZMPD 11.2500 IN.
								SCALE .0300

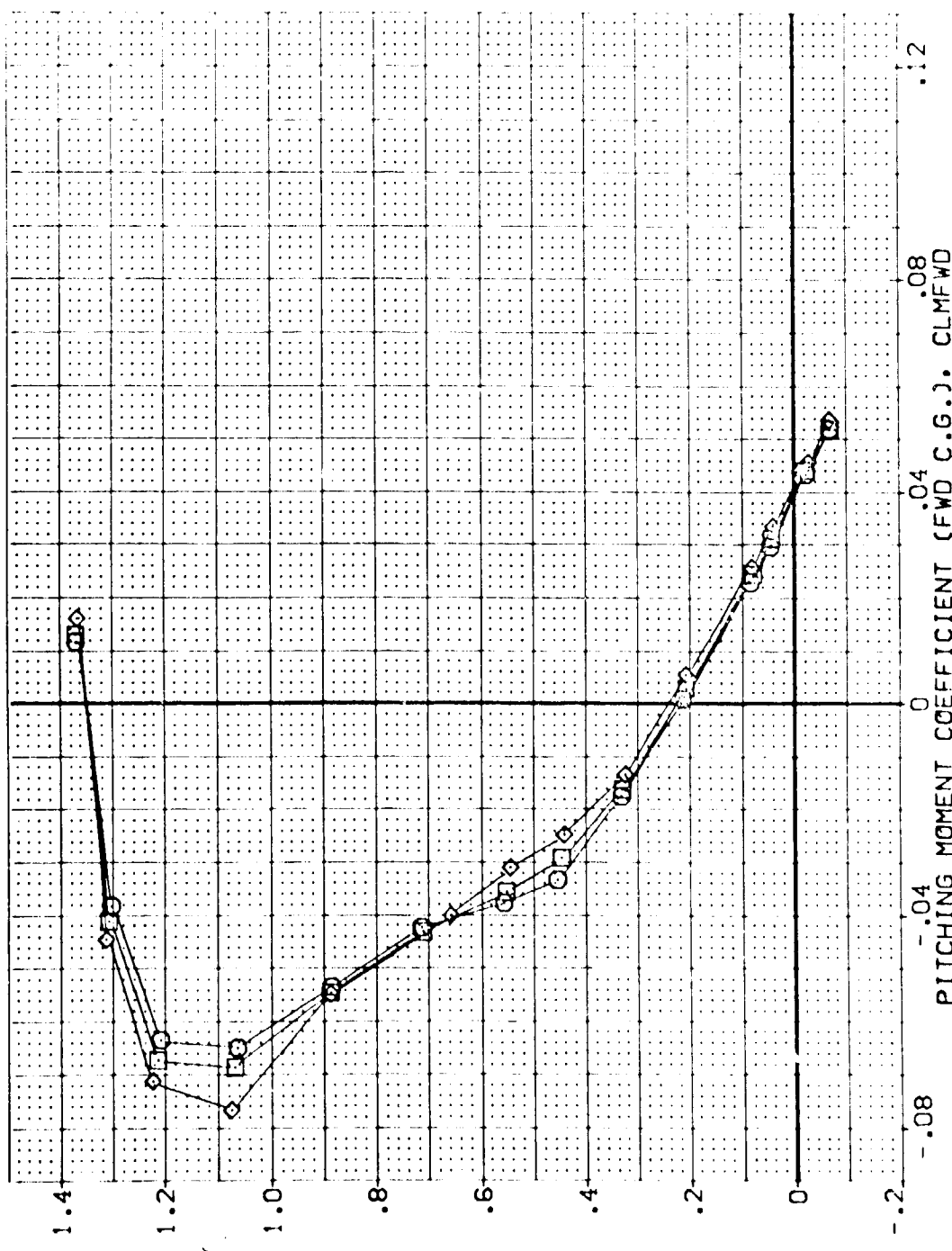


FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

(C)MACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RV/L	AILRON	BD/LAP	SPDRBK	REFERENCE INFORMATION
{TEPR:7}	ARC 11-747 DA53A B C M F V	5.100	.000	.000	25.000	SREF 2.4210 SQ.FT.
{TEPR:6}	ARC 11-747 DA53A B C M F V	3.700	.000	.000	25.000	LREF 14.2440 IN.
{TEPR:5}	ARC 11-747 DA53A B C M F V	2.200	.000	.000	25.000	BREF 28.1004 IN.
						XREF 32.3010 IN.
						YREF .0000 IN.
						ZREF .0000 IN.
						SCALE 1:2500
						SCALE

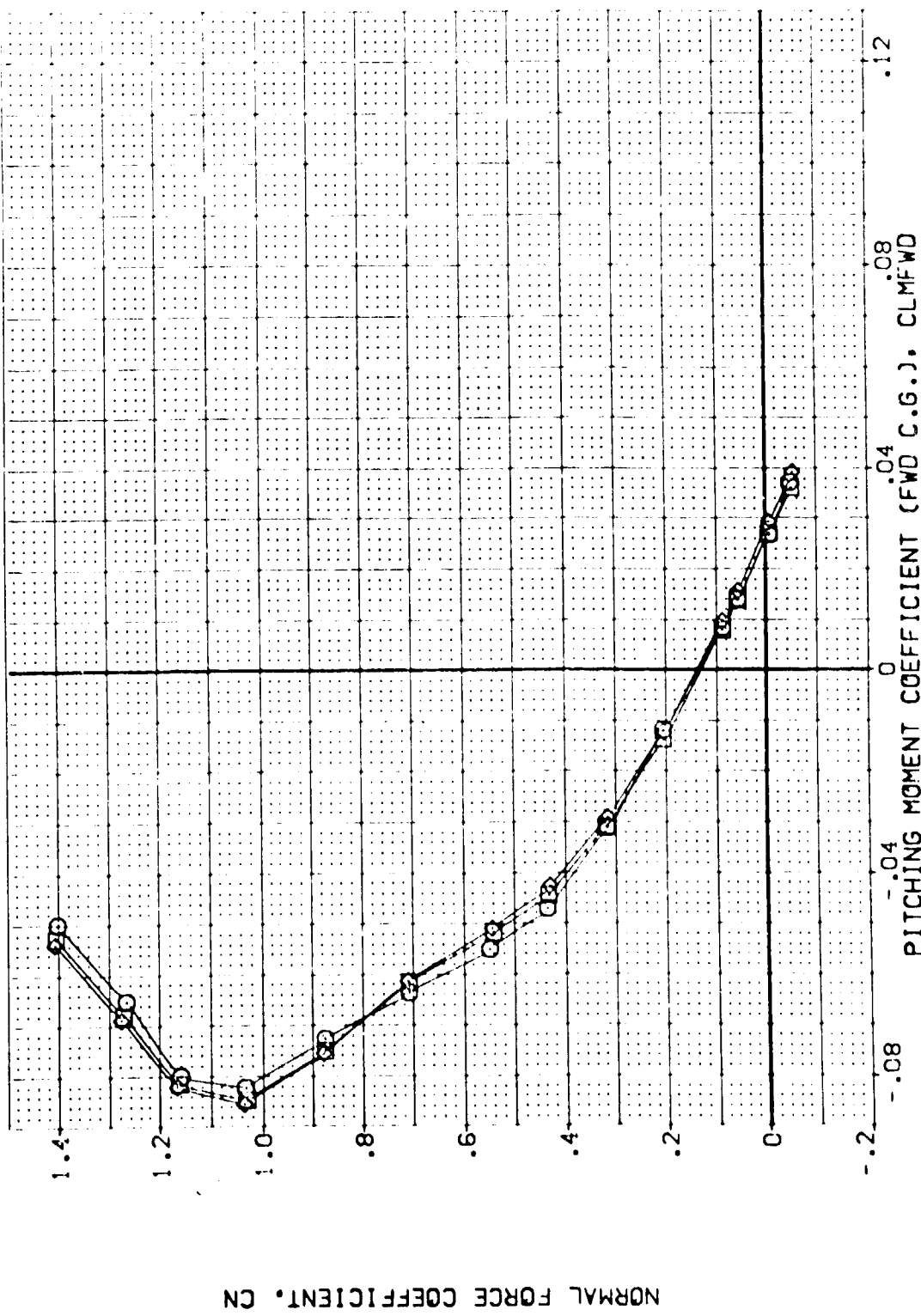


FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

(C)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RV/L	AIL/RON	BO/FLAP	SP/DBRK	REFERENCE INFORMATION
{TEJRI7}	ARC 11-747 DA53A B C M F VI V	5.100	.000	.000	25.000	SREF 2.4210 SC.FT.
{TEJRI6}	ARC 11-747 DA53A B C M F VI V	3.700	.000	.000	25.000	LREF 14.2440 IN.
{TEJRI5}	ARC 11-747 DA53A B C M F VI V	2.200	.000	.000	25.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

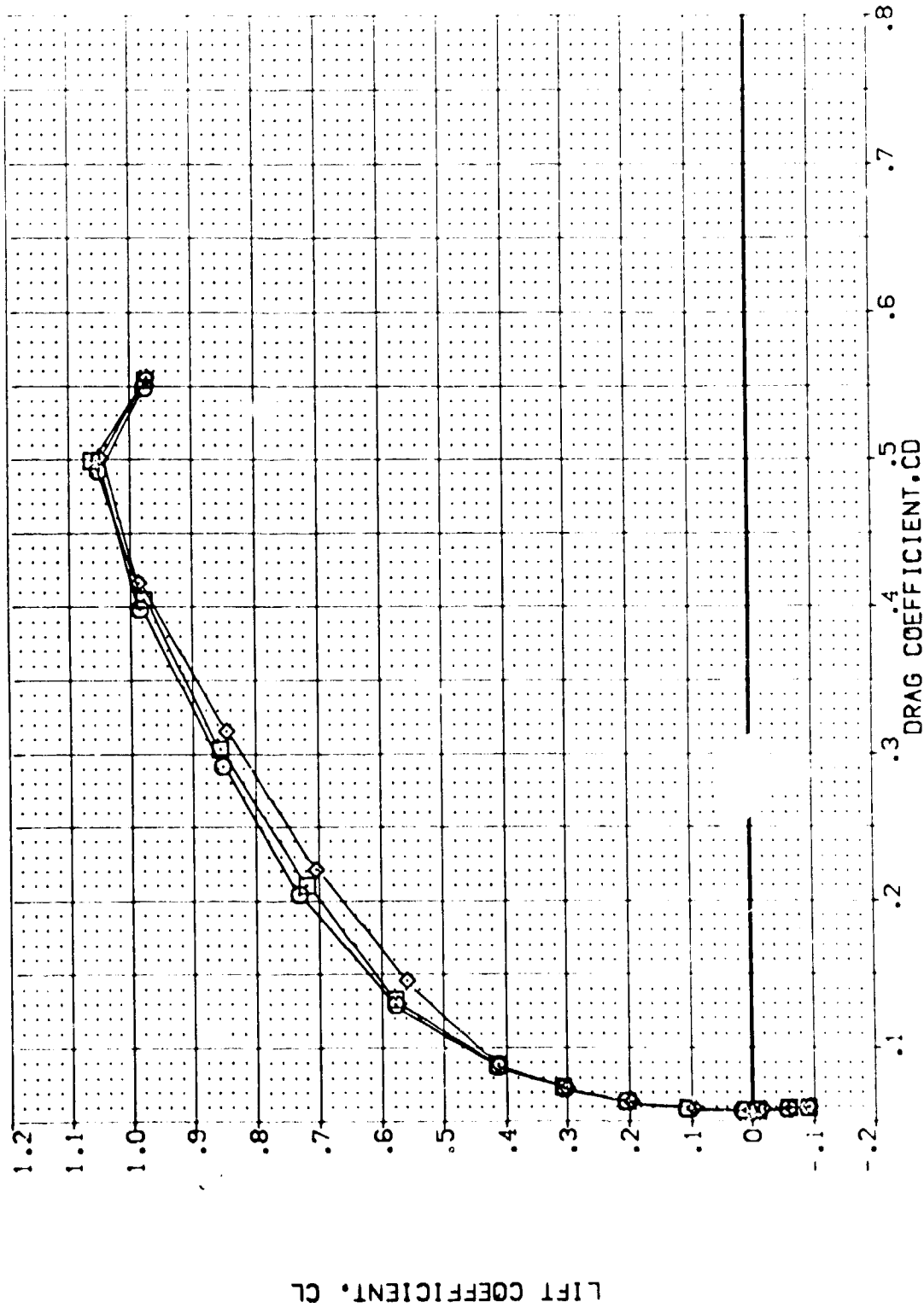


FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

(A)MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RV/L	AIR/ON	REF/LAP	SP/BRK	REFERENCE INFORMATION
{TEJR17}	ARC 11-747 GAS3A B C H F VI	5.100	.000	.000	25.000	SREF 2.4210 SQ.FT.
{TEJR16}	ARC 11-747 GAS3A B C H F VI	3.700	.000	.000	25.000	LREF 14.2440 IN.
{TEJR15}	ARC 11-747 GAS3A B C H F VI	2.200	.000	.000	25.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

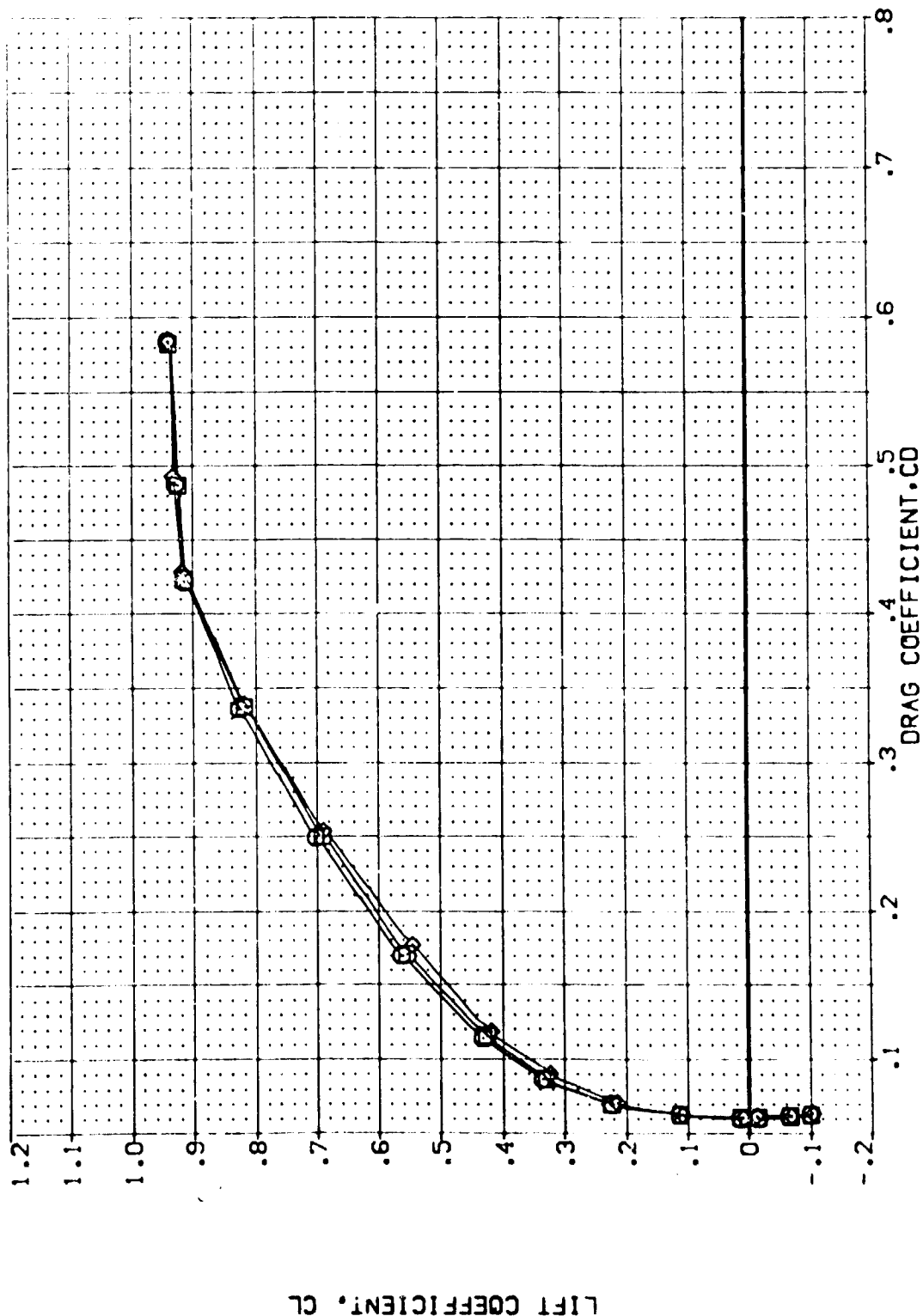
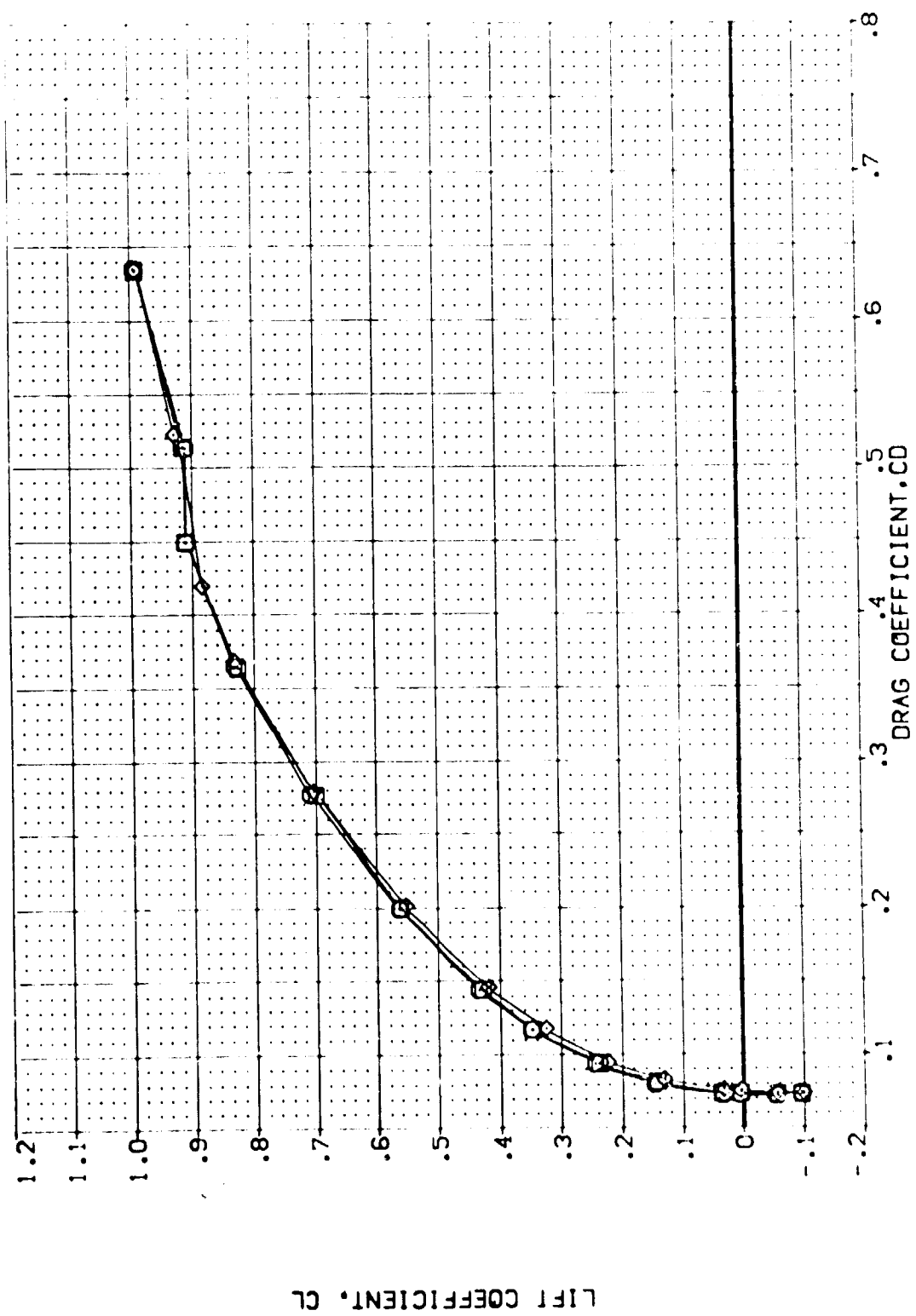


FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

(B)MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RV/L	AIRLON	BO/LAP	SPOBRK	REFERENCE INFORMATION
(TEJR17)	ARC 11-747 DAS3A B C M F VI	5.100	.000	.000	25.000	SREF 2.4210 SQ.FT.
(TEJR16)	ARC 11-747 DAS3A B C M F VI	3.700	.000	.000	25.000	LREF 14.2440
(TEJR15)	ARC 11-747 DAS3A B C M F VI	2.200	.000	.000	25.000	BREF 28.1004
						XMRP 32.3010
						YMRP .0000
						ZMRP .0000
						SCALE 11.2500
						SCALE .0300



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RNVL	AIRLON	BOELAP	SPOBRK	REFERENCE INFORMATION
(TEJR17)	ARC 11-747 OAS3A B C M F V1	5.100	.000	.000	25.000	SREF 2.4210 SQ.FT.
(TEJR16)	ARC 11-747 OAS3A B C M F V1	3.700	.000	.000	25.000	LREF 14.2440 IN.
(TEJR15)	ARC 11-747 OAS3A B C M F V1	2.200	.000	.000	25.000	BREF 28.1004 IN.
						YREF 32.3010 IN.
						ZREF .0000 IN.
						SCALE 11.2500 IN.
						SCALE .0300

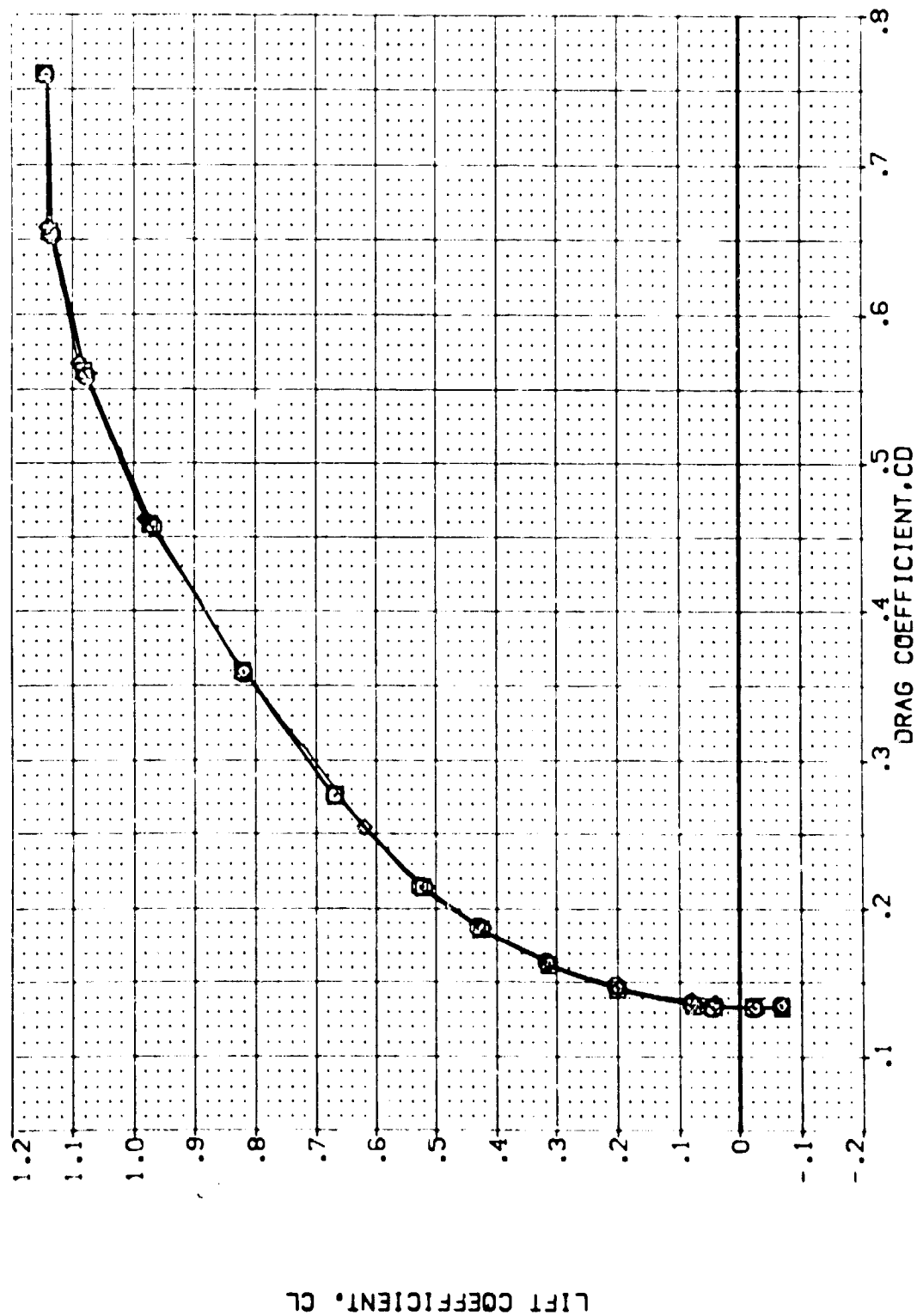


FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

(C)MACH = 1.05



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RV/L	AIL/RON	BDF/LAP	SP/DBRK	REFERENCE INFORMATION
(TEAR17)	ARC 11-747 OAS3A B C H F VI V	5.100	.000	.000	25.000	SREF 2.4210 SQ.FT.
(TEAR16)	ARC 11-747 OAS3A B C H F VI V	3.700	.000	.000	25.000	LREF 14.2440 IN.
(TEAR15)	ARC 11-747 OAS3A B C H F VI V	2.200	.000	.000	25.000	BREF 28.1004 IN.
						XREF 32.3010 IN.
						YREF 11.2500 IN.
						ZREF .0300 IN.
						SCALE

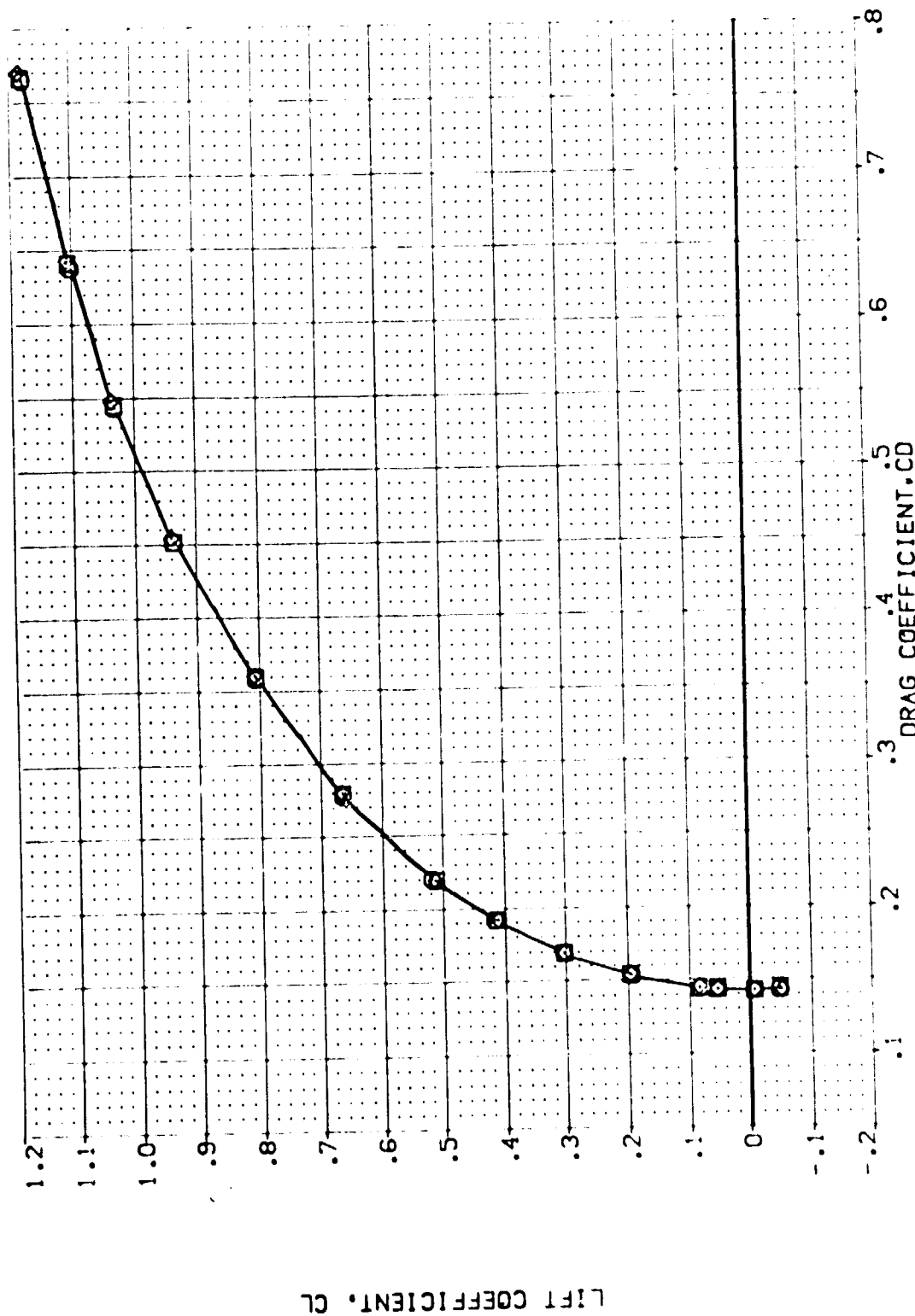


FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

(E)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RV/L	AIR/ON	BO/LAP	SPO/ERK	REFERENCE INFORMATION
(TEUR17)	ARC 11-747 BA53A B C M F V	5.100	.000	.000	25.000	SREF 2.4210 SQ.FT.
(TEUR16)	ARC 11-747 BA53A B C M F V	3.700	.000	.000	25.000	LREF 14.2440 IN.
(TEUR15)	ARC 11-747 BA53A B C M F V	2.200	.000	.000	25.000	BREF 28.1004 IN.
						XREF 32.3010 IN.
						YREF 0.000 IN.
						ZREF 11.2500 IN.
						SCALE .0300

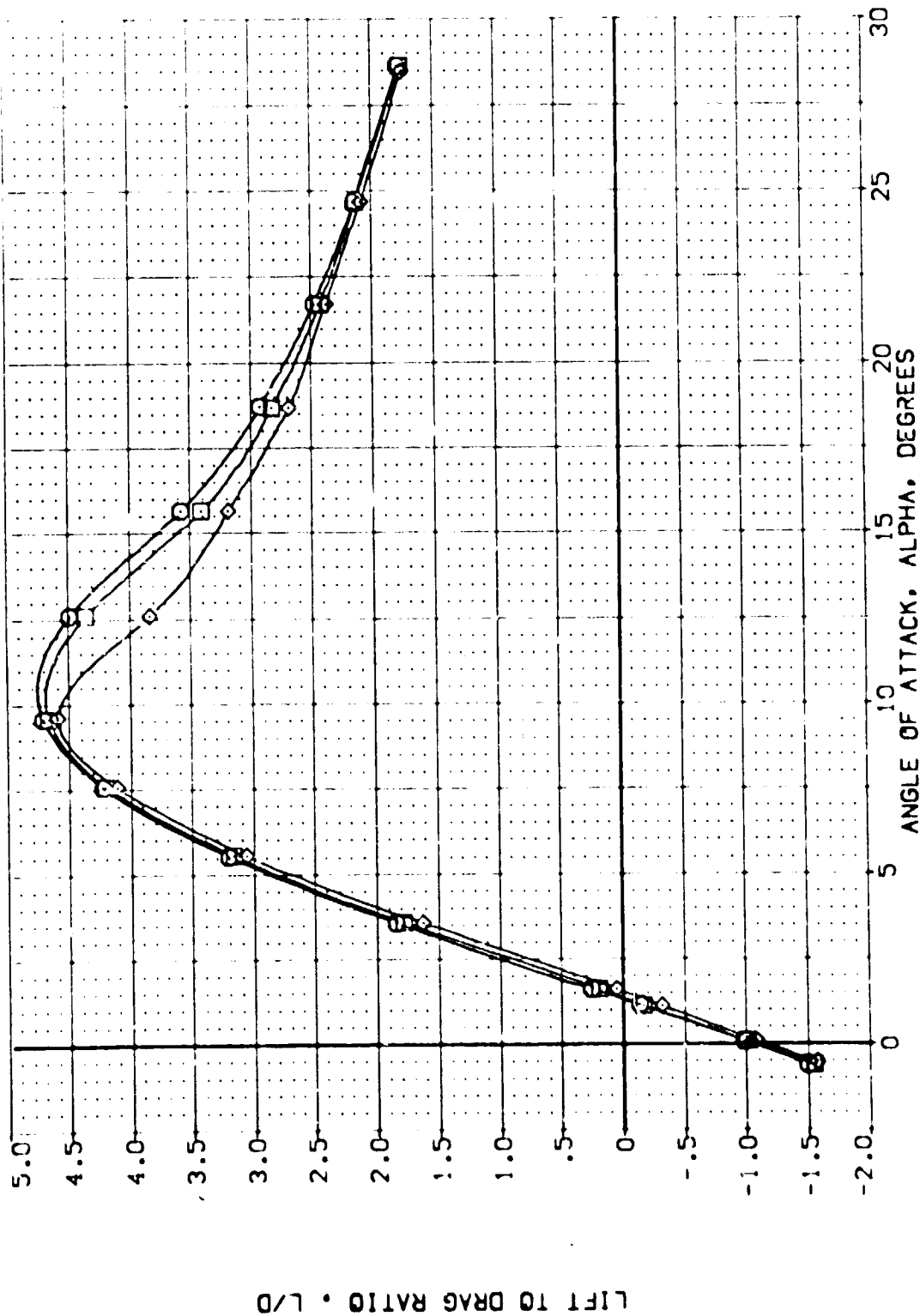


FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

(A) MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RV/L	AIRLON	BDF LAP	SPDRBK	REFERENCE INFORMATION
(TEUR17)	ARC 11-747 DA53A B C M F VI V	5.100	.000	.000	25.000	SREF 2.4210 SQ.FT.
(TEUR16)	ARC 11-747 DA53A B C M F VI V	3.700	.000	.000	25.000	LREF 14.2440 IN.
(TEUR15)	ARC 11-747 DA53A B C M F VI V	2.200	.000	.000	25.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP 11.2500 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

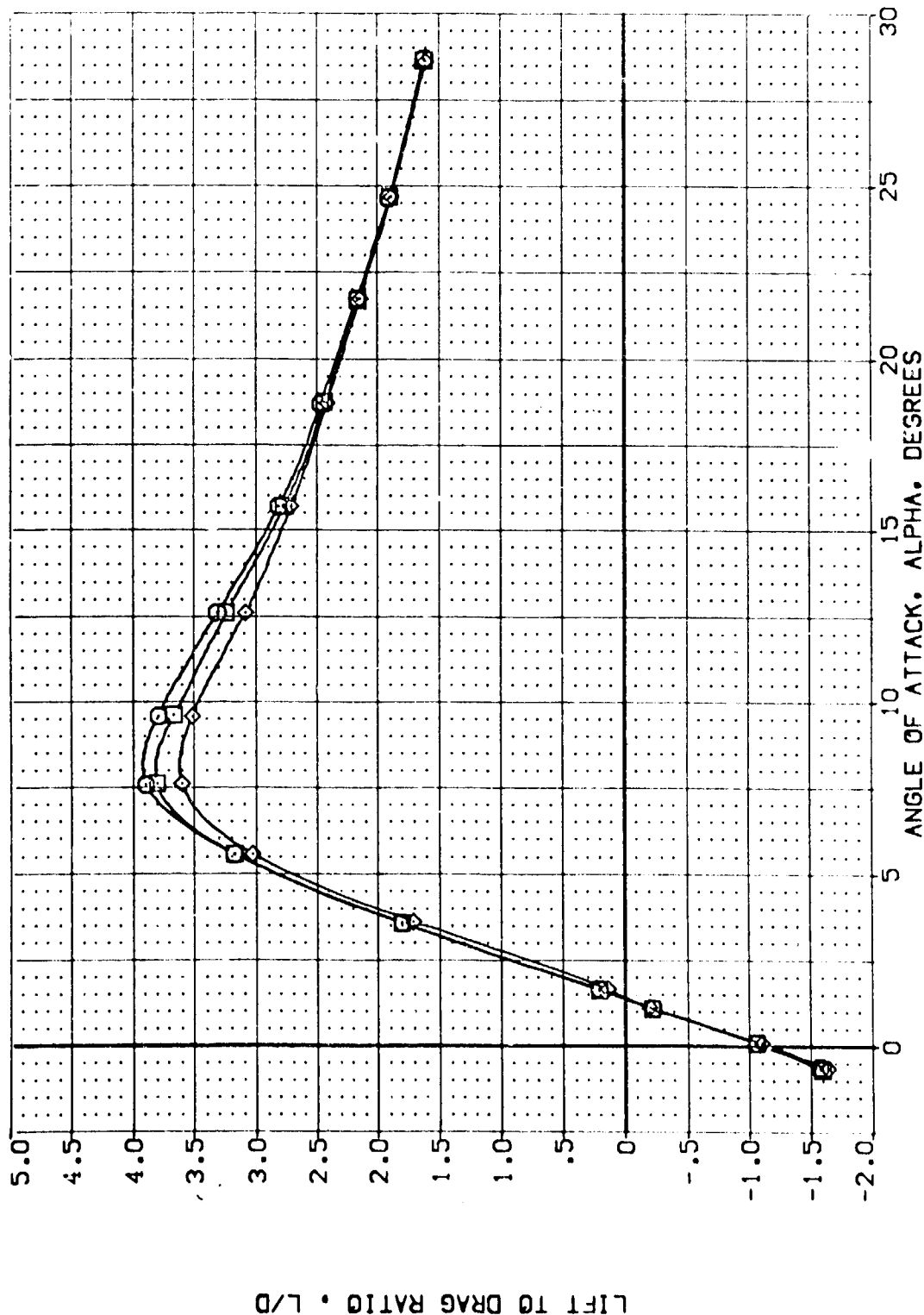


FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

(B)MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RV/L	AILRON	BOFLAP	SPOBRK	REFERENCE INFORMATION
{TEJR17}	ARC 11-747 OAS3A B C M F VI V	5.100	.000	.000	25.000	SREF 2.4210 SQ.FT.
{TEJR16}	ARC 11-747 OAS3A B C M F VI V	3.700	.000	.000	25.000	LREF 14.2440 IN.
{TEJR15}	ARC 11-747 OAS3A B C M F VI V	2.200	.000	.000	25.000	SREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

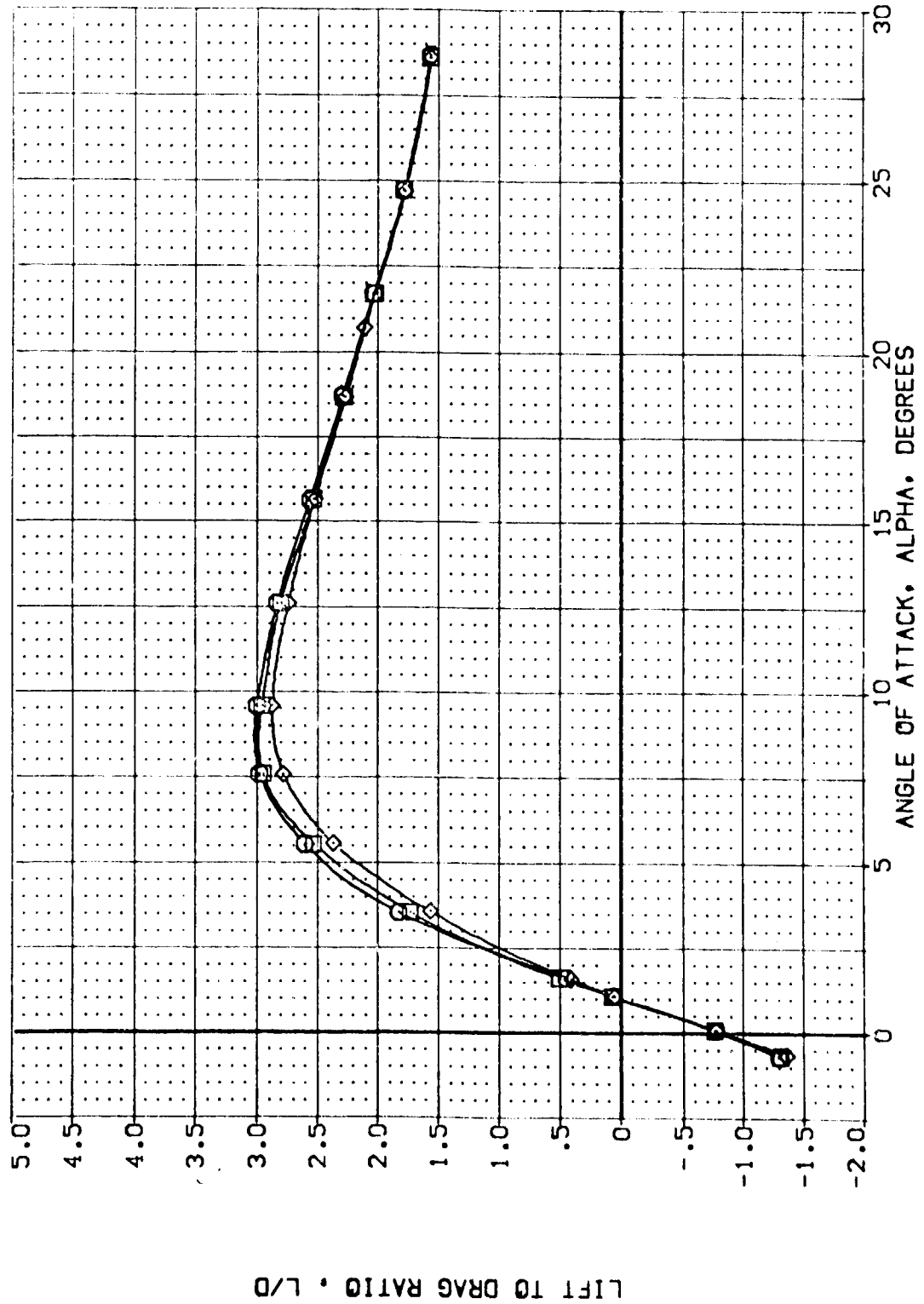


FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

(C)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RVL	AIRLON	BOFLAP	SPDRK	REFERENCE INFORMATION
(TEJR17)	ARC 11-747 OAS3A B C M F VI V	5.100	.000	.000	25.000	SREF 2.4210 SQ.FT.
(TEJR16)	ARC 11-747 OAS3A B C M F VI V	3.700	.000	.000	25.000	LREF 14.2440 IN.
(TEJR15)	ARC 11-747 OAS3A B C M F VI V	2.200	.000	.000	25.000	BREF 28.1004 IN.
						XMREF 32.3010 IN.
						YMREF .0000 IN.
						ZMREF 11.2500 IN.
						SCALE .0300

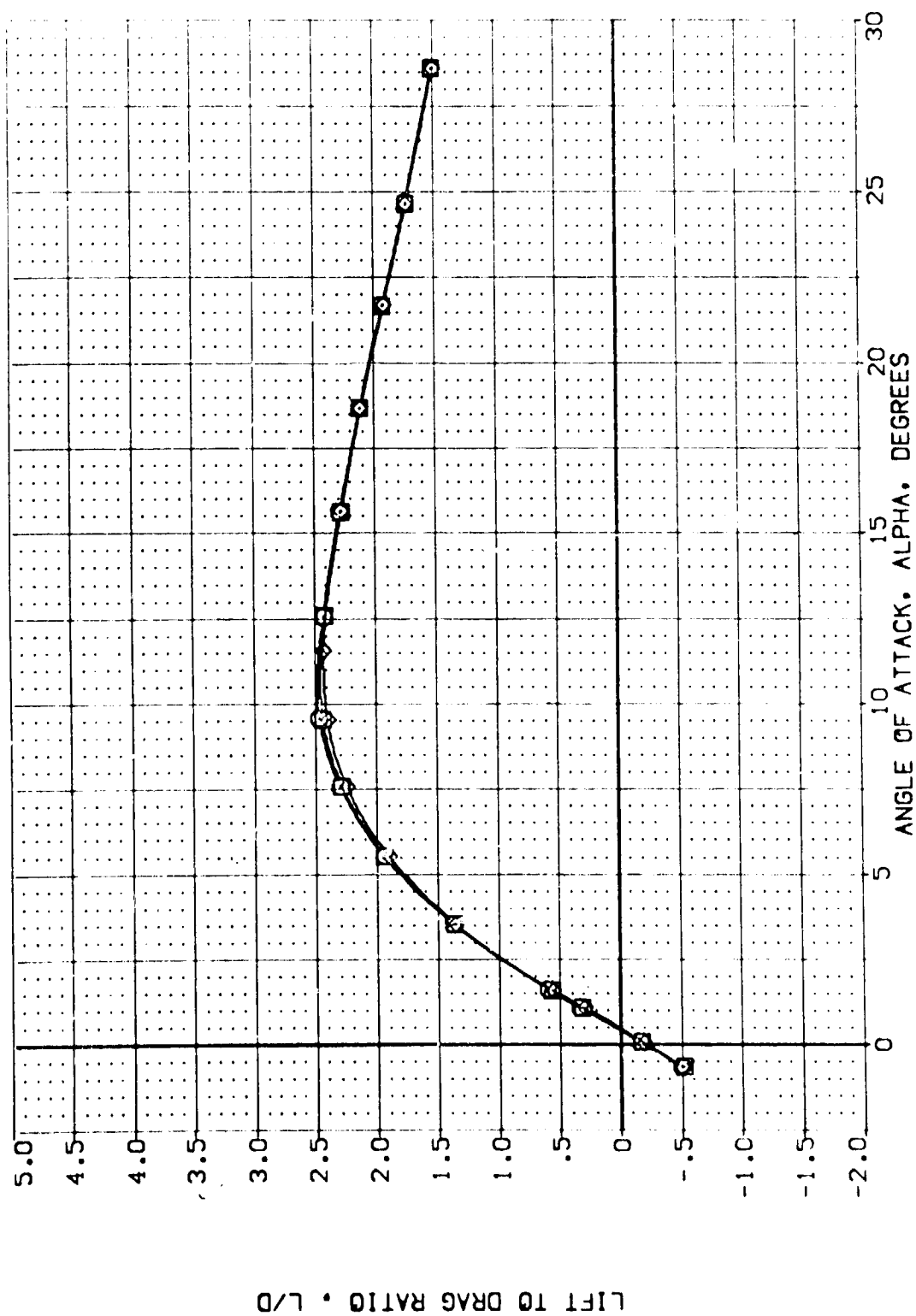


FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

(O)MACH = 1.05



DATA SET SYMBOL    CONFIGURATION DESCRIPTION    REFERENCE INFORMATION

[AEJR17]	ARC 11-147 PAS3A B	SREF	2.4210	50. FT.
[AEJR16]	ARC 11-147 PAS3A B	LREF	14.2140	IN.
[AEJR15]	ARC 11-147 PAS3A B	BREF	28.1004	IN.
		XMRP	32.3010	IN.
		YMRP	.0000	IN.
		ZMRP	11.2500	IN.
		SCALE	.0300	SCALE

RVL    AILRON    BDLAP    SPOBRK

5.100	.000	.000	25.000
3.700	.000	.000	25.000
2.200	.000	.000	25.000

HIGH RVL  
NOM. RVL  
LOW RVL

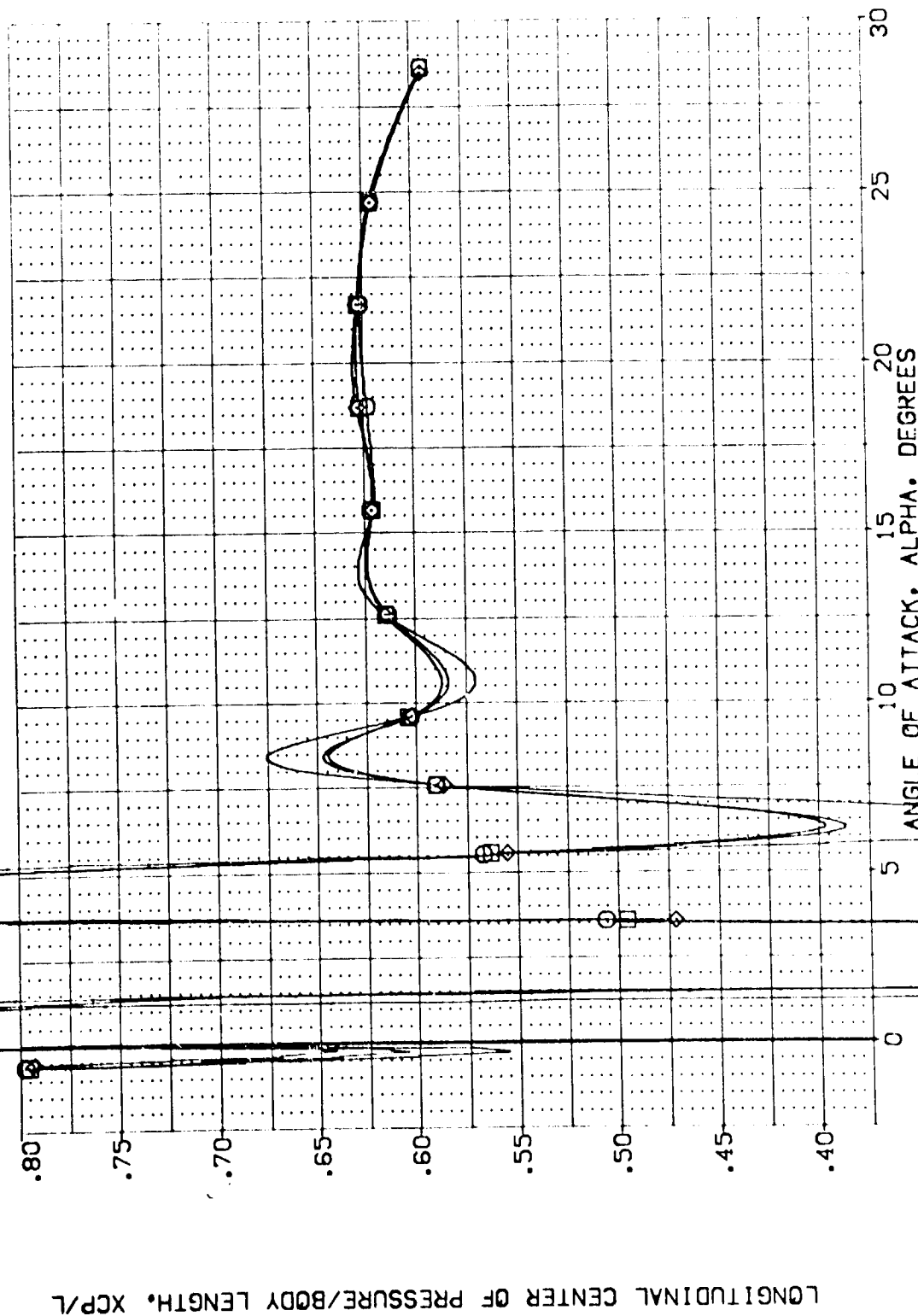


FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

(A)MACH = .60

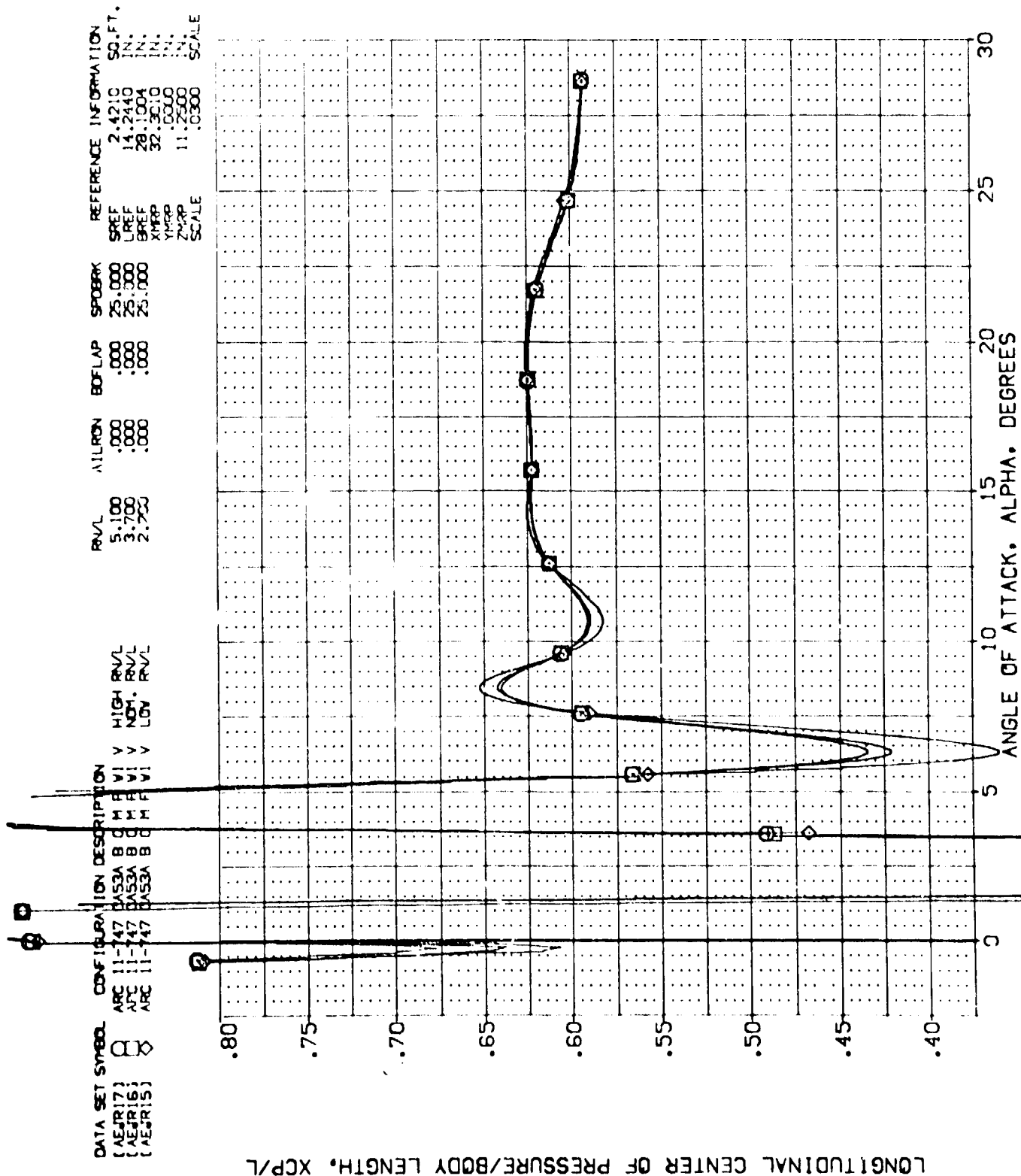


FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

(B)MACH = .80



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RV/L	ALL/RO/N	BD/LAP	SP/DGRK	REFERENCE INFORMATION
(AEJRI7)	ARC 11-247 DA63A B C M F VI V	5.100	.000	.000	25.000	SREF 2.4210 SQ.FT.
(AEJRI6)	ARC 11-247 DA63A B C M F VI V	3.700	.000	.000	25.000	LREF 14.2440 IN.
(AEJRI5)	ARC 11-247 DA63A B C M F VI V	2.200	.000	.000	25.000	BREF 28.1004 IN.
						XMRP 37.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

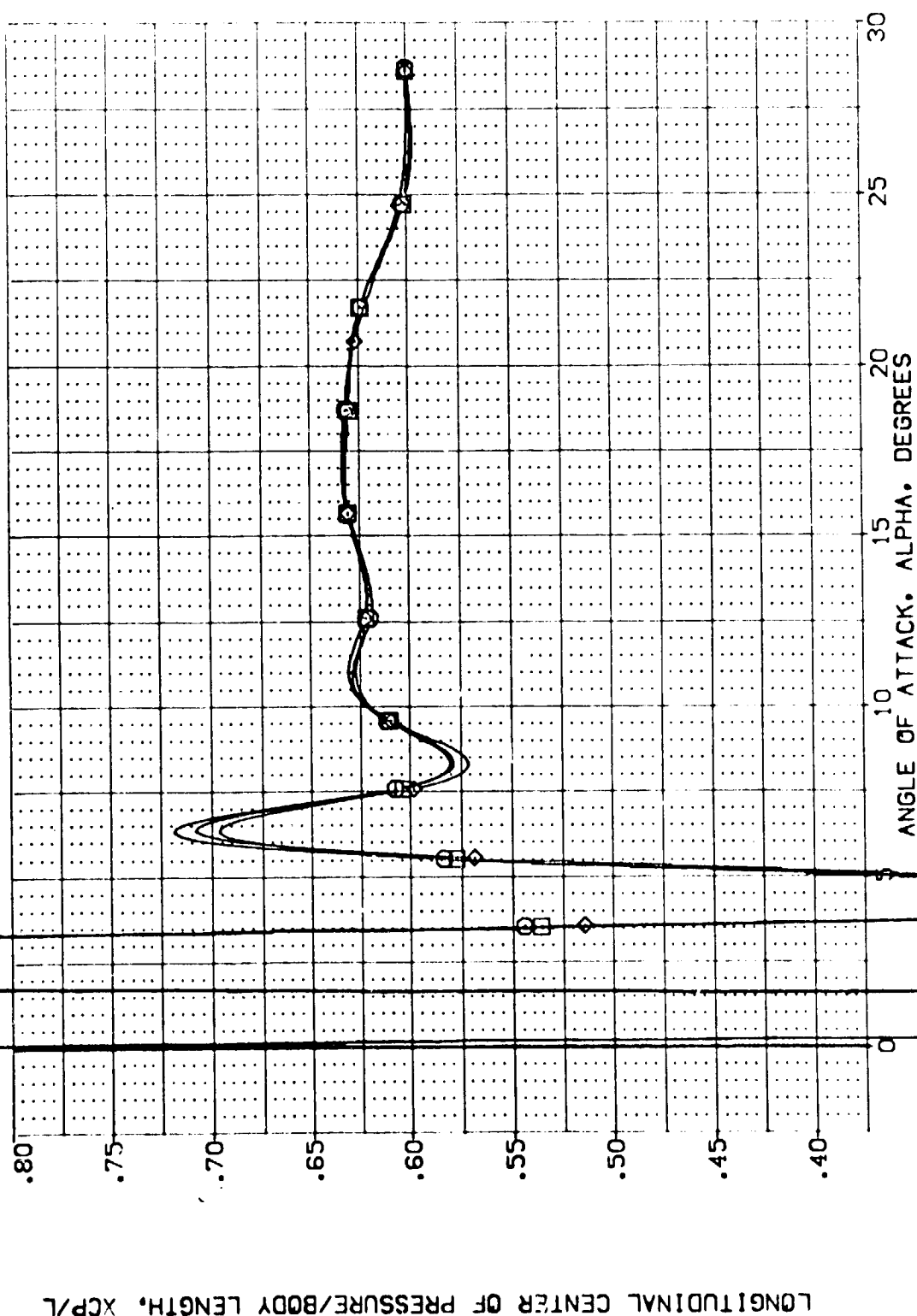


FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

(C)MACH = .90



DATA SET SYMBOL    CONFIGURATION DESCRIPTION    HIGH RVL    RVL    AILRON    BOFLAP    SPDBRK    REFERENCE INFORMATION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	HIGH RVL	RVL	AILRON	BOFLAP	SPDBRK	REFERENCE INFORMATION
(AEP17)	ARC 11-747 B A53A B C M F V1 V	RVL	5.100	.000	.000	25.000	SREF 2.4210 SQ.FT.
(AEP18)	ARC 11-747 B A53A B C M F V1 V	NDV	3.700	.000	.000	25.000	LREF 14.2440 IN.
(AEP15)	ARC 11-747 B A53A B C M F V1 V	LDV	2.200	.000	.000	25.000	BREF 28.1004 IN.
							XREF 32.3010 IN.
							YREF .0000 IN.
							ZREF 11.2500 IN.
							SCALE .0300

LONGITUDINAL CENTER OF PRESSURE/BODY LENGTH, XCP/L

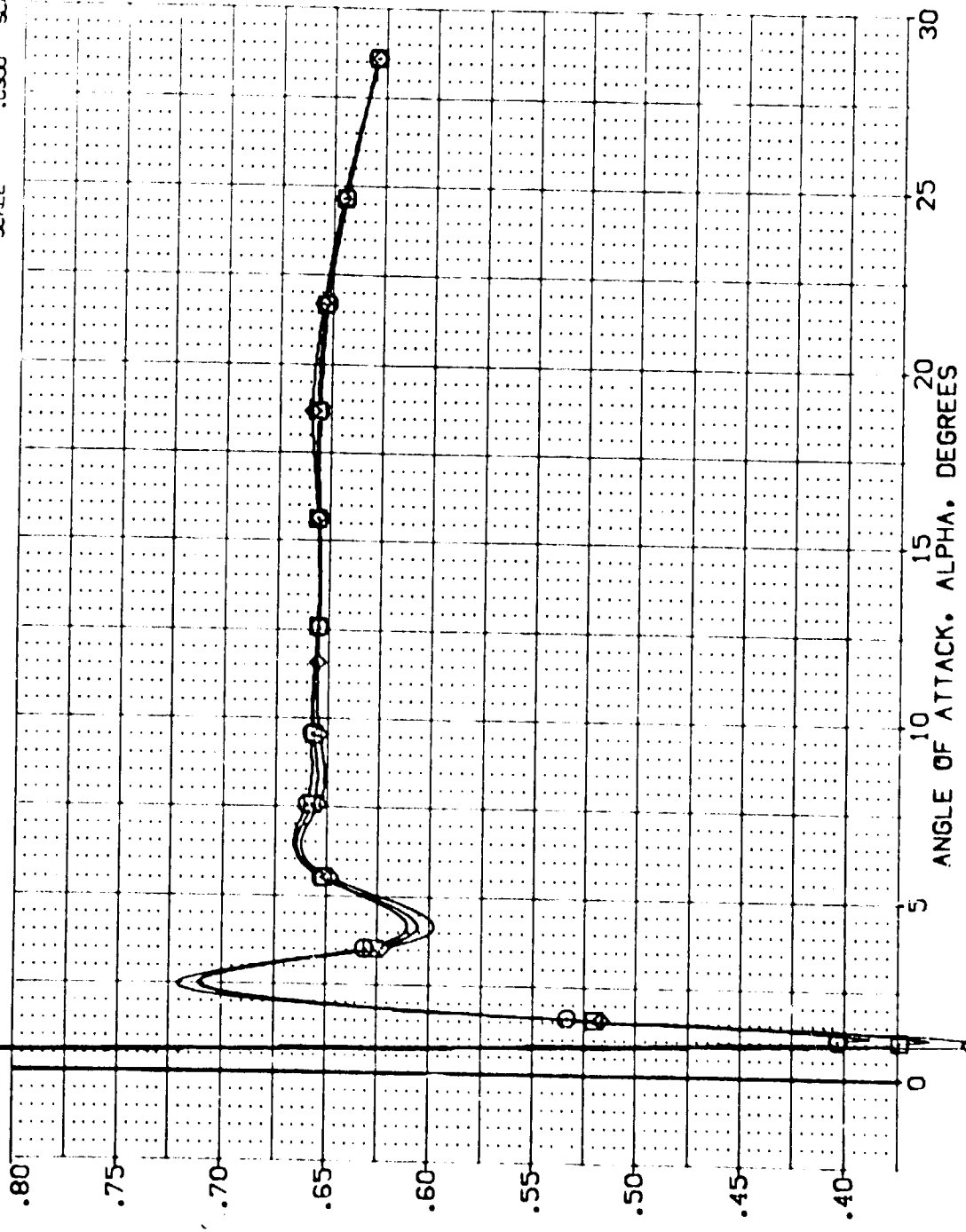


FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

(C)MACH = 1.05





DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RV/L	ALL/BN	BD/LAP	SP/BRK	REFERENCE INFORMATION
(AEJRI7)	ARC 11-747 OAS3A B C M F VI	5.100	.000	.000	25.000	SREF 2.4210 SQ.FT.
(AEJRI6)	ARC 11-747 OAS3A B C M F VI	3.700	.000	.000	25.000	LREF 14.2440 IN.
(AEJRI5)	ARC 11-747 OAS3A B C M F VI	2.200	.000	.000	25.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

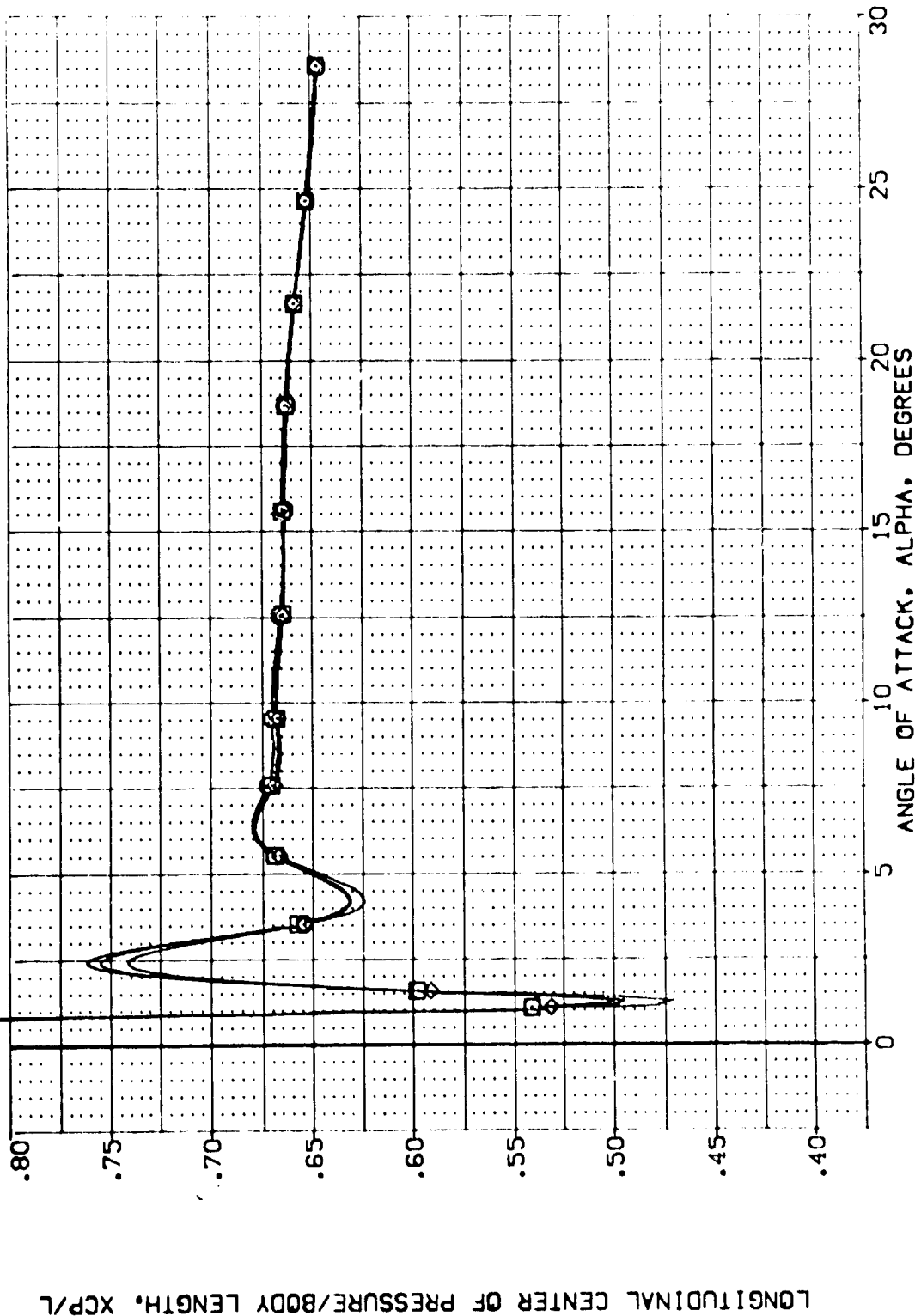


FIG. 5 LONGITUDINAL REYNOLDS NUMBER EFFECTS

(E)MACH = 1.20



DATA SET SYMBOL: [1EJ028] [1EJ016] CONFIGURATION DESCRIPTION: ARC 11-747 QAS3A B C H F V2 V NOM: RN/L V NOM: RN/L

ELEVON	AILERON	BOFLAP	SPDBRK	REFERENCE INFORMATION
.000	.000	.000	25.000	SREF 2.4210 SQ.FT.
.000	.000	.000	25.000	LREF 14.2440 IN.
				BREF 28.1004 IN.
				XMRP 32.3010 IN.
				YMRP .0000 IN.
				ZMRP 11.2500 IN.
				SCALE .0300

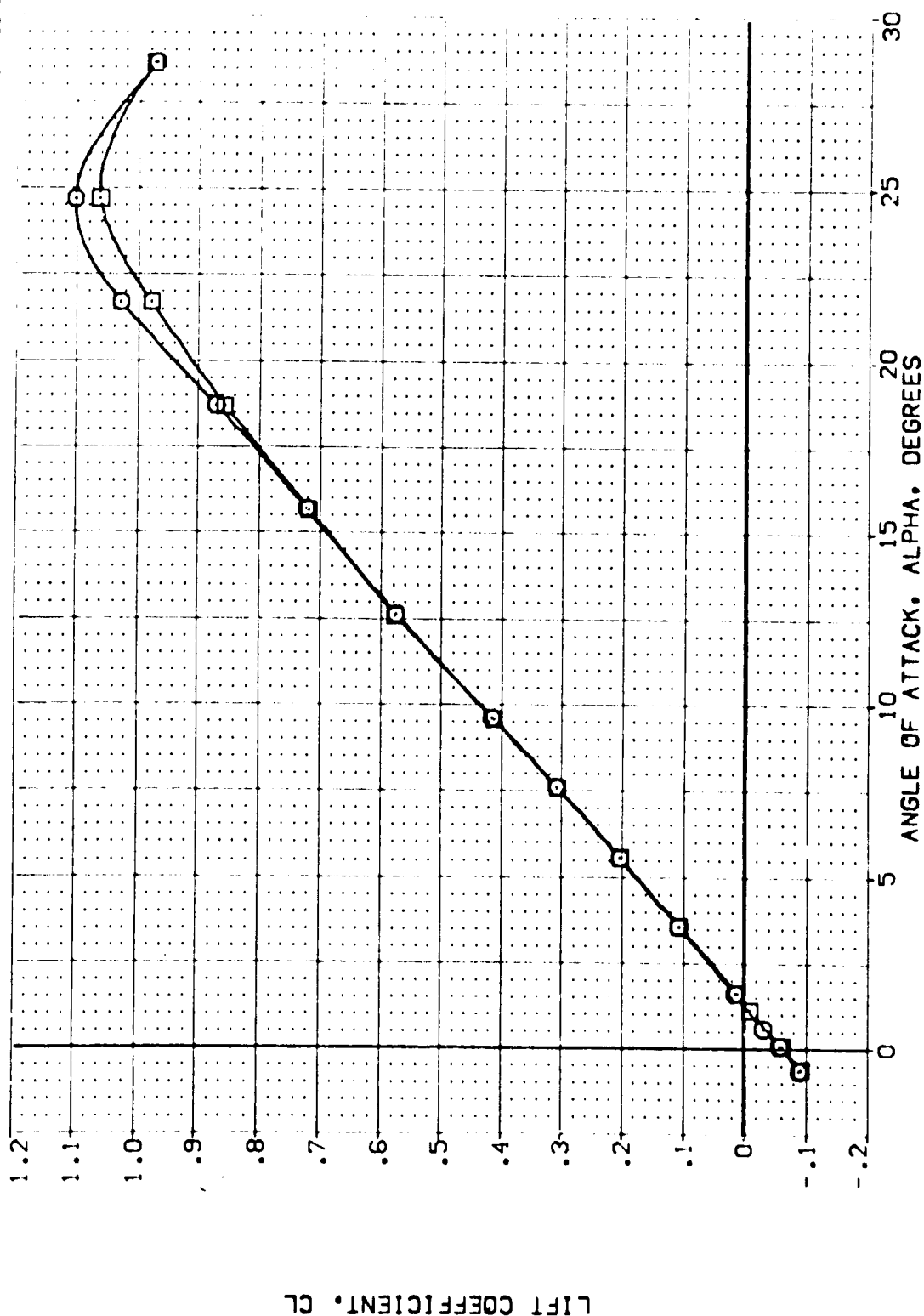


FIG. 6 WING MATRIX

(A)MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPDBRK	REFERENCE INFORMATION
{TEJ028}	ARC 11-747 DAS3A B C M F V2 V	.000	.000	.000	25.000	SREF 2.4210 50. FT.
{TEJ016}	ARC 11-747 DAS3A B C M F V1 V	.000	.000	.000	25.000	LREF 14.2440
						BREF 28.1004
						XMRP 32.3010
						YMRP .0000
						ZMRP .0000
						SCALE 11.2500
						SCALE .0300

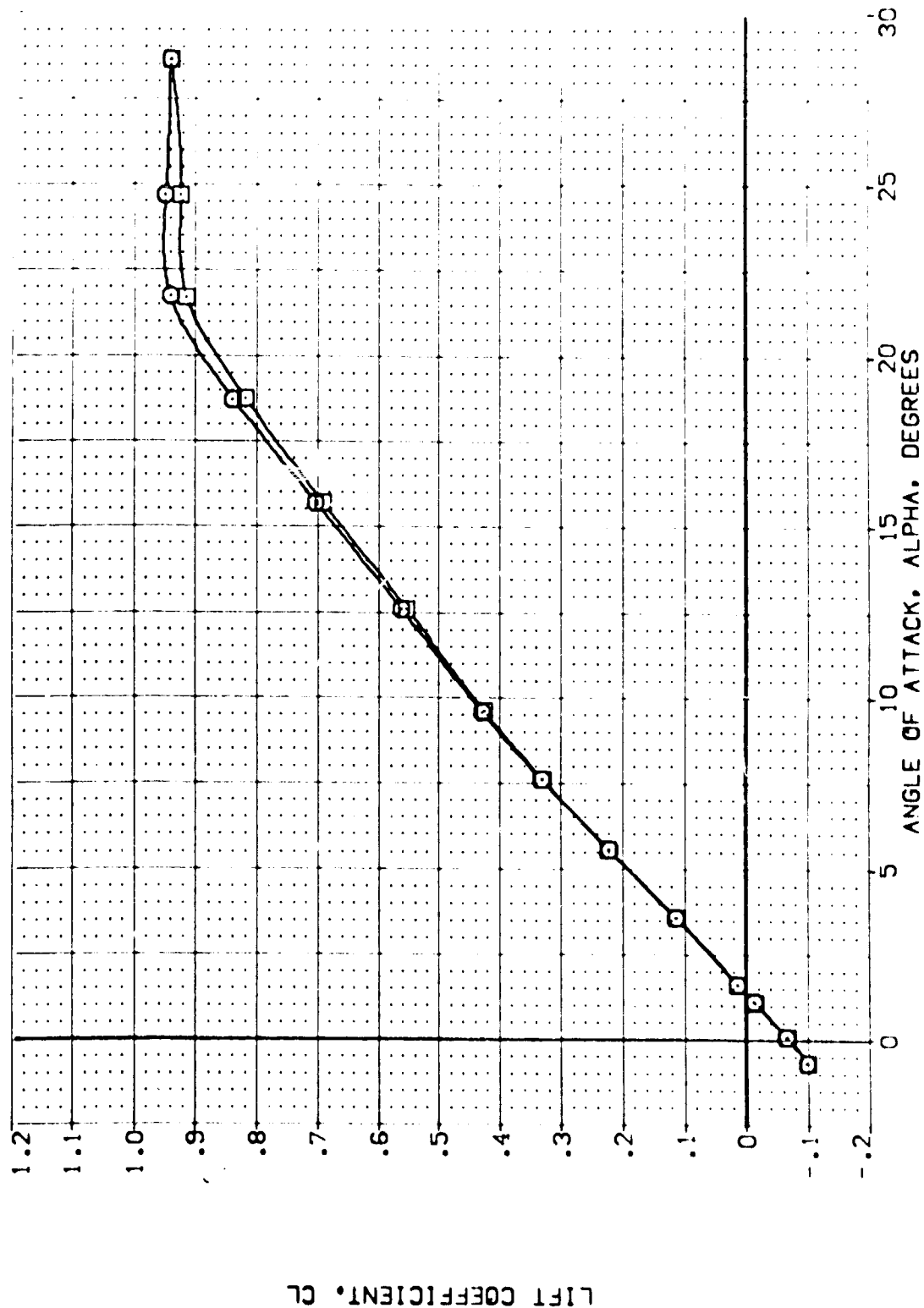


FIG. 6 WING MATRIX

(B)MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPDBRK	REFERENCE INFORMATION
(TEJ028)	ARC 11-747 DA53A B C M F V2 V	.000	.000	.000	25.000	SREF 2.4210 SQ.FT.
(TEJ016)	ARC 11-747 DA53A B C M F V1 V	.000	.000	.000	25.000	UREF 14.2440 N.
						BREF 28.1004 N.
						XMRP 32.3010 N.
						YMRP .0000 N.
						ZMRP 11.2500 N.
						SCALE .0300

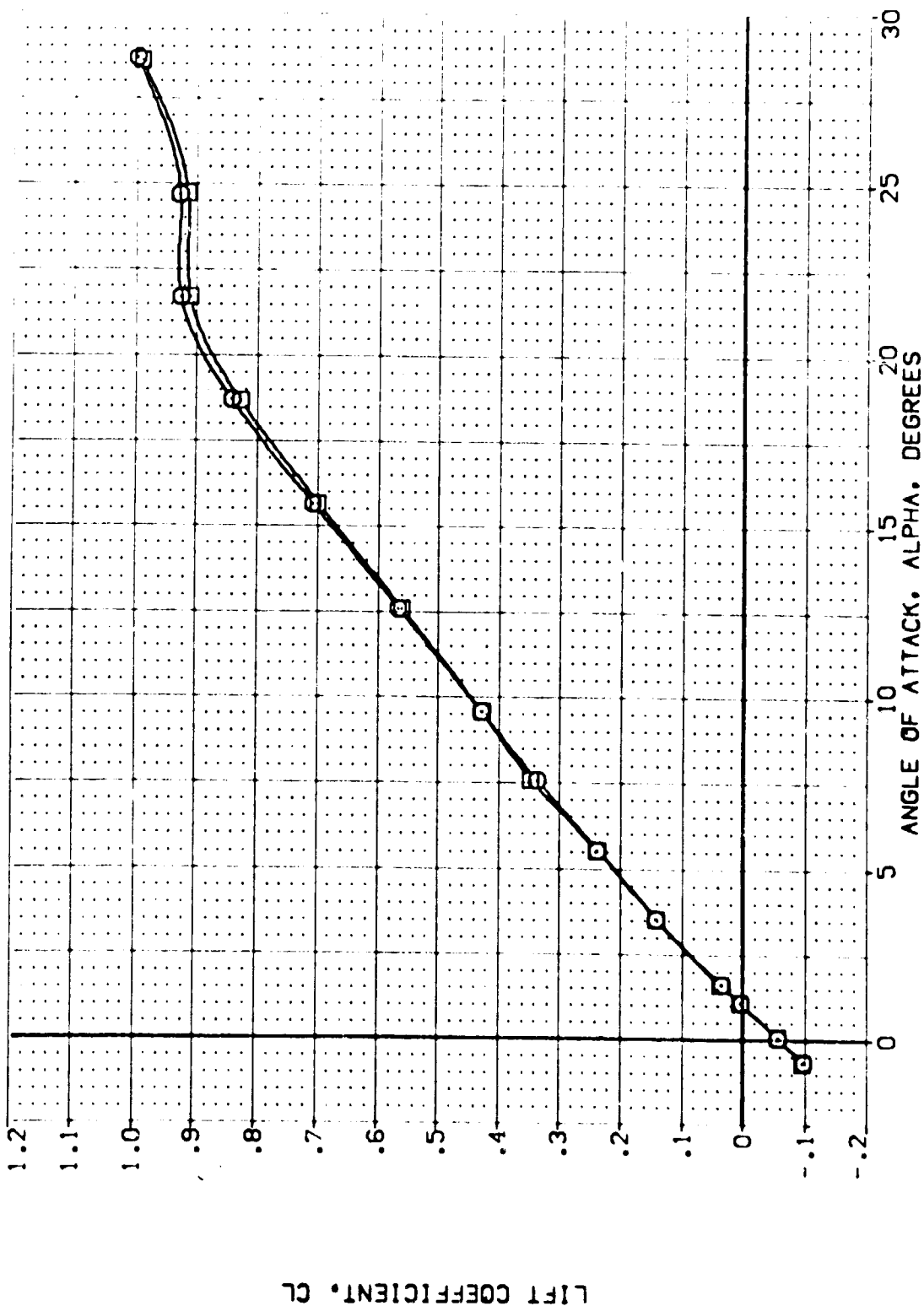


FIG. 6 WING MATRIX

(C)MACH = .90

# DATA SET SYMBOL

{TEJ008}  
{TEJ016}

# CONFIGURATION DESCRIPTION

ARC 11-747 BAS3A B C M F V2 V NOM. RV/L  
ARC 11-747 BAS3A B C M F V1 V NOM. RV/L

# ELEVON

A1LRON  
.000  
.000

# WING LAR

SP0BRK  
25.000  
25.000

# REFERENCE INFORMATION

SREF 2.4210 SQ.FT.  
LREF 14.2440  
BREF 28.1004  
XMRP 32.3010  
YMRP 11.0000  
ZMRP 11.2500  
SCALE .0300

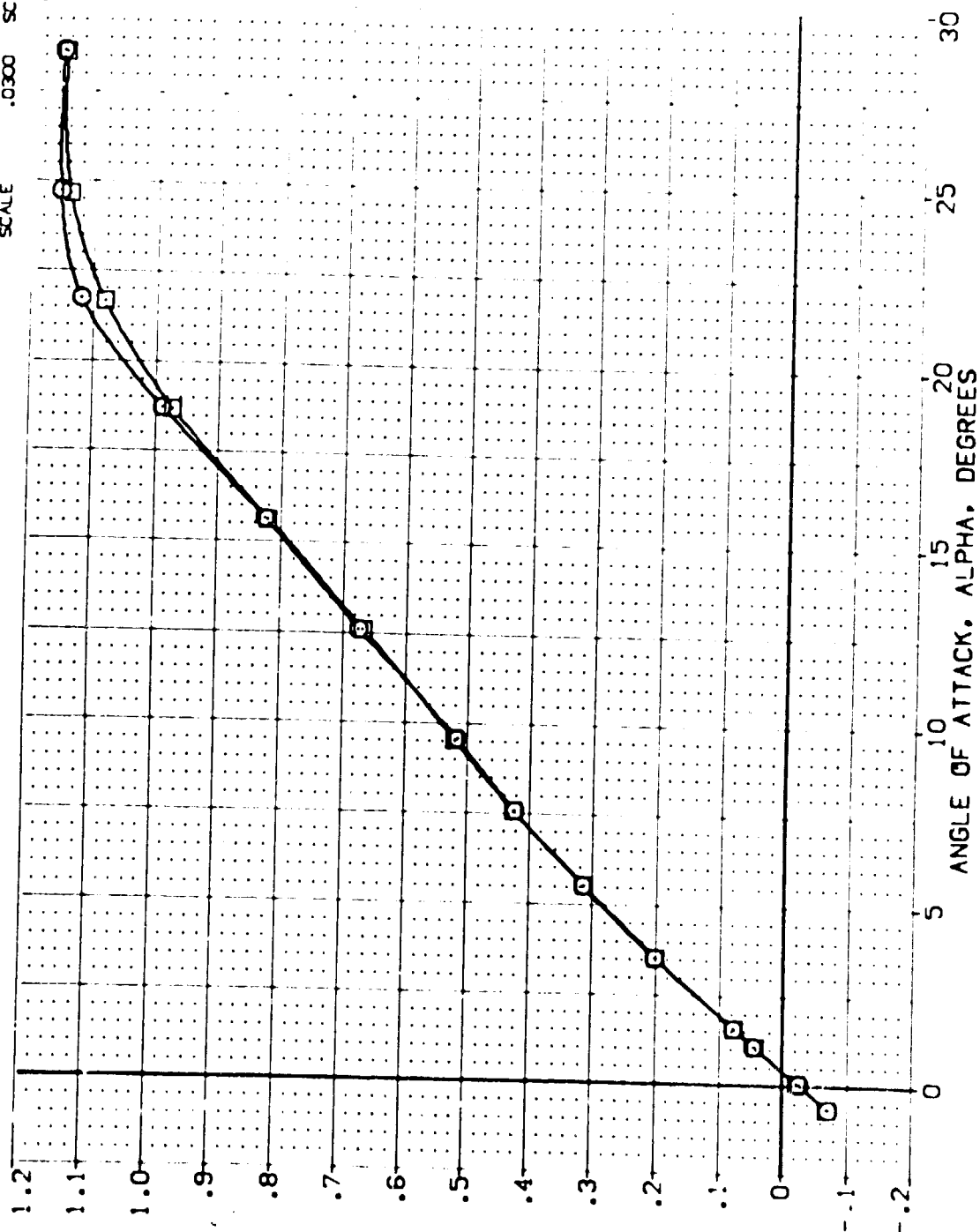


FIG. 6 WING MATRIX

(D)MACH = 1.05



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPDBRK	REFERENCE INFORMATION
(TEJ028)	ARC 11-747 0A53A B C H F V2 V 1.001, RV/L	.000	.000	.000	25.000	SREF 2.4210 SQ. FT.
(TEJ016)	ARC 11-747 0A53A B C H F V1 V 1.001, RV/L	.000	.000	.000	25.000	LREF 14.2440
						BREF 28.1004
						XMRP 32.3010
						YMRP .0000
						ZMRP 11.2500
						SCALE .0300

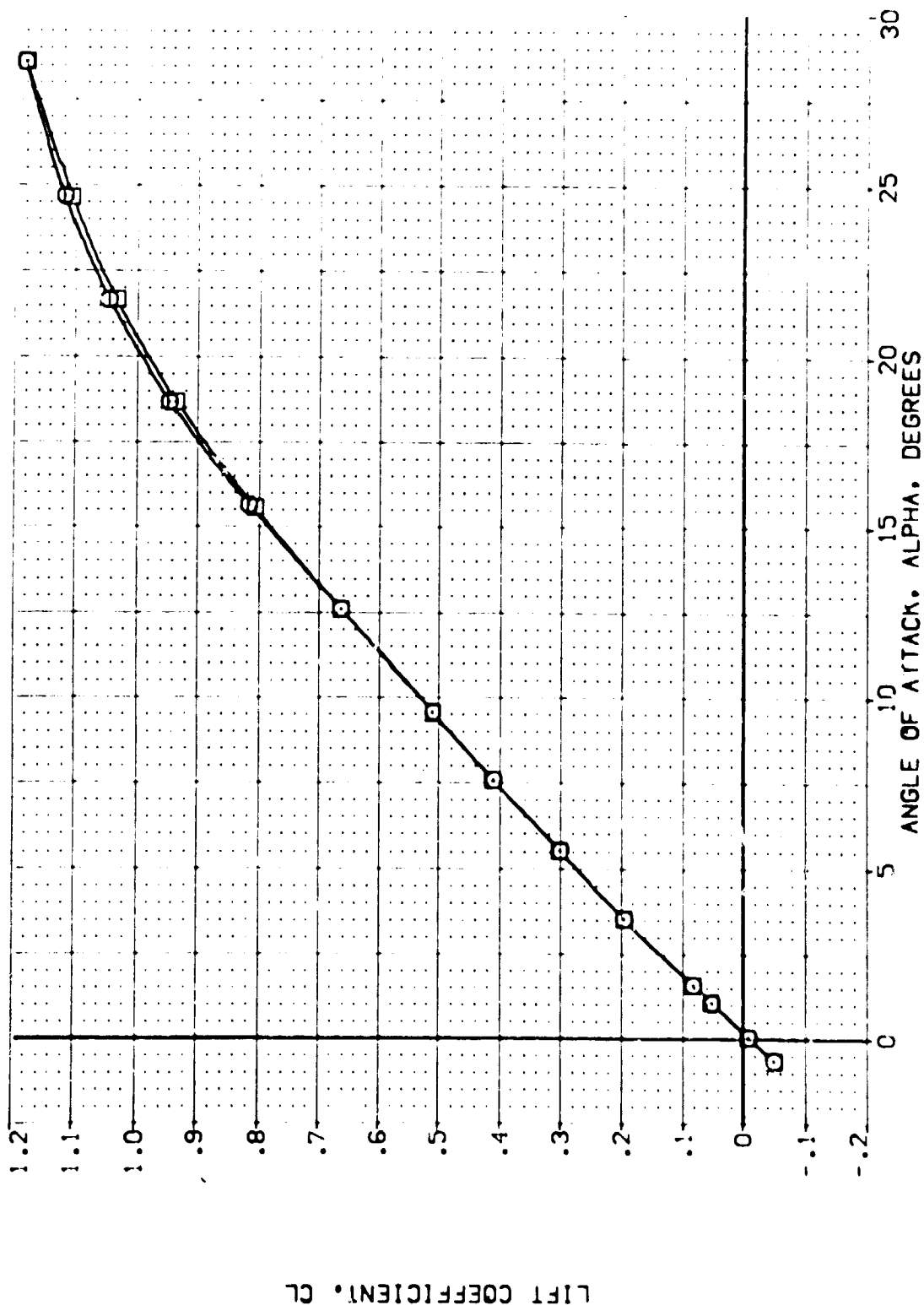


FIG. 6 WING MATRIX

(E)MACH = 1.20



DATA SET SYMBOL: [ ]  
 ([TEJ028])  
 ([TEJ016])

CONFIGURATION DESCRIPTION:  
 ARC 11-747 OAS3A B C M F V2 V  
 ARC 11-747 OAS3A B C M F V1 V

ELEVON: .000  
 AILERON: .000  
 BDF LAP: .000  
 SPOORX: 25.000  
 25.000

REFERENCE INFORMATION:  
 SREF: 2.4210 50. FT.  
 LREF: 14.2440  
 BREF: 28.0004  
 XMRP: 32.3010  
 YMRP: .0000  
 ZMRP: 11.2500  
 SCALE: .0300

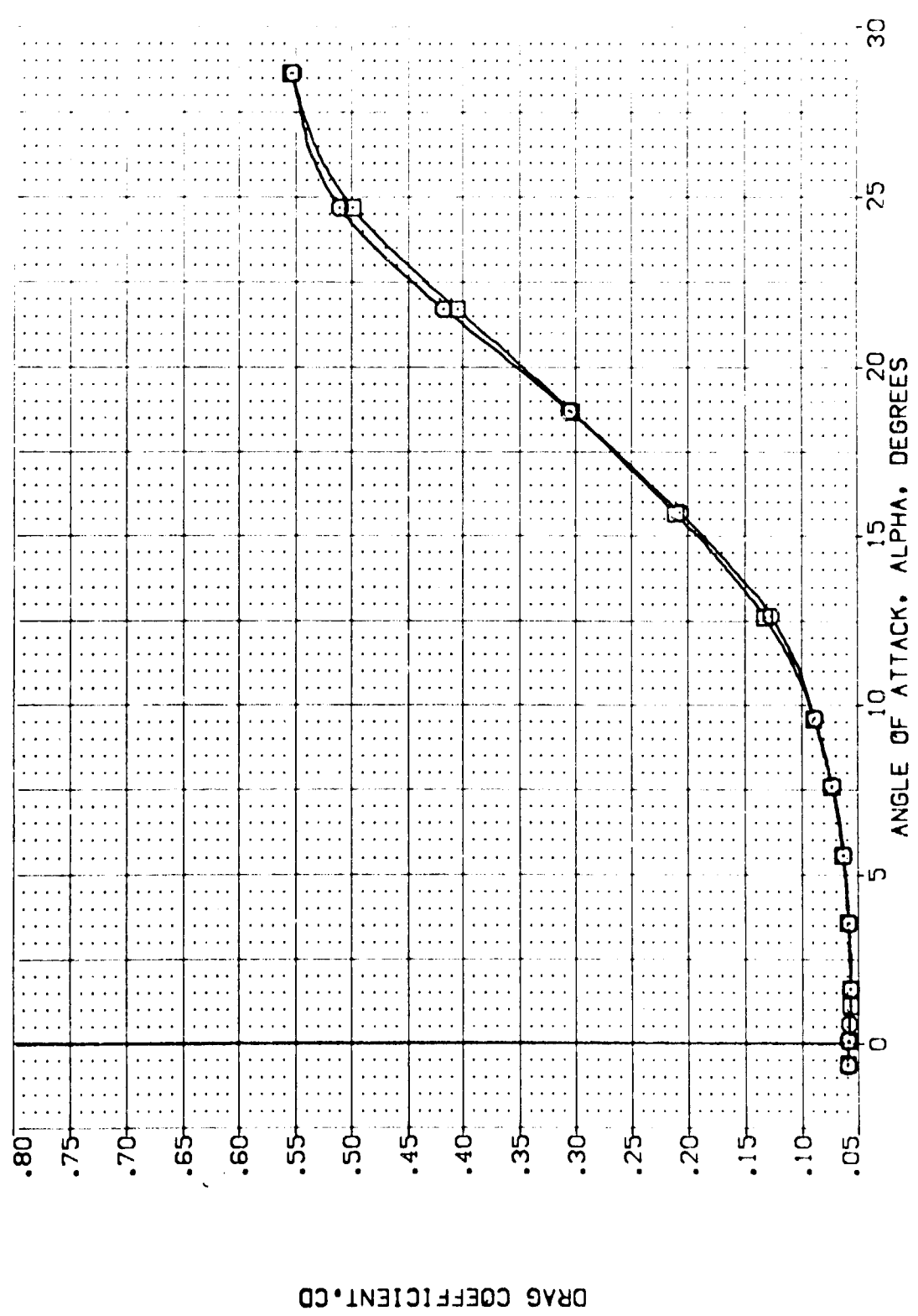


FIG. 6 WING MATRIX

(A)MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPODBRK	REFERENCE INFORMATION
(TEJ028)	ARC 11-747 DAS3A B C H F V2 V	.000	.000	.000	25.000	SREF 2.4210 SQ.FT.
(TEJ016)	ARC 11-747 DAS3A B C H F V1 V	.000	.000	.000	25.000	LREF 14.2440 IN.
						BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

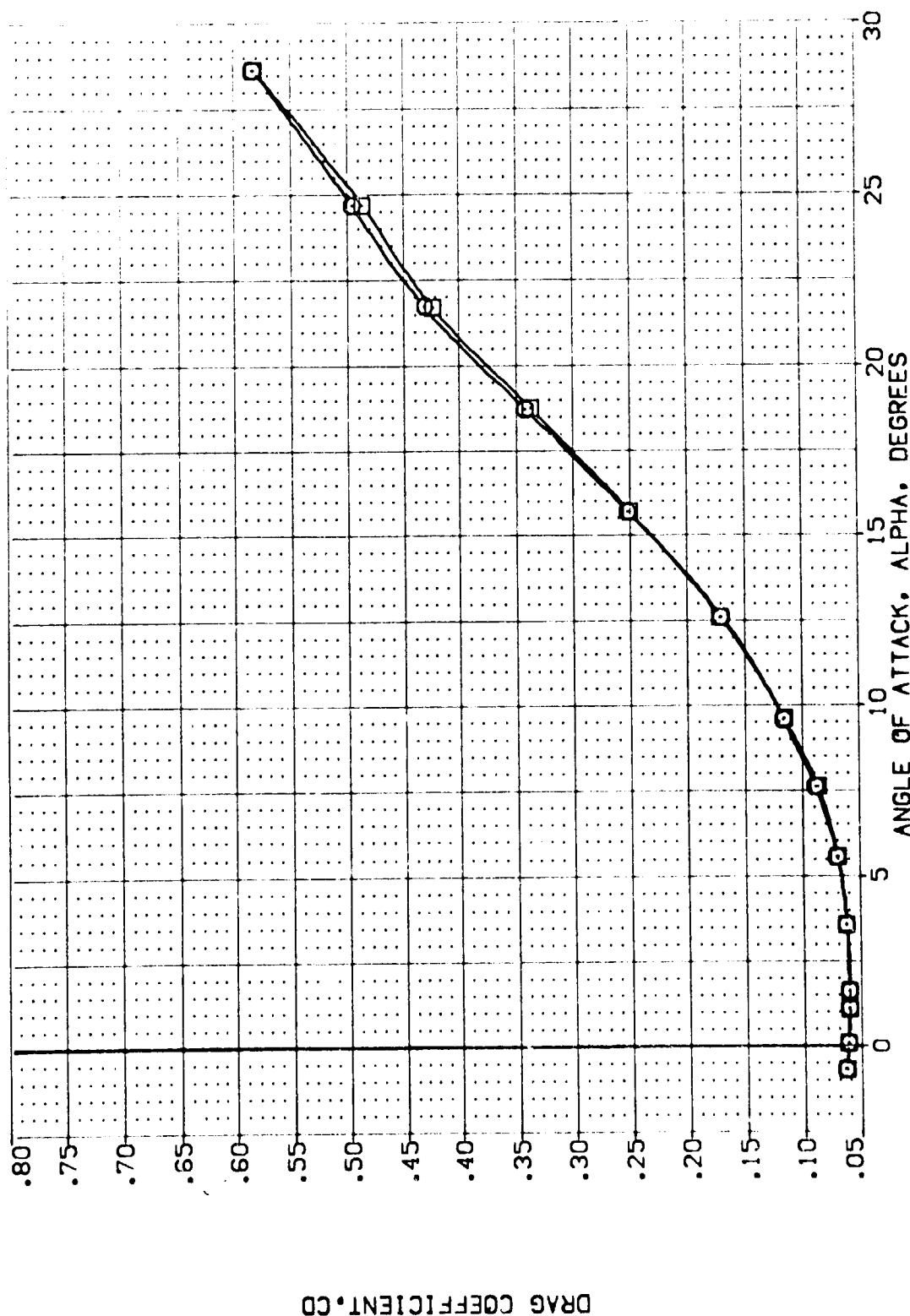


FIG. 6 WING MATRIX  
(B)MACH = .80

DATA SET SYMBOL: [TEJ028]  
 [TEJ016]

CONFIGURATION DESCRIPTION:  
 ARC 11-747 OAS3A B C M F V2 V  
 ARC 11-747 OAS3A B C M F V1 V

NON: RN/L  
 NON: RN/L

ELEVON: .000  
 AILERON: .000  
 BOFLAP: .000  
 SPOBRK: 25.000  
 25.000

REFERENCE INFORMATION:  
 SREF: 2.4210 SQ.FT.  
 LREF: 14.2440 IN.  
 BREF: 28.1004 IN.  
 XMRP: 32.3010 IN.  
 YMRP: .0000 IN.  
 ZMRP: 11.2500 IN.  
 SCALE: .0300

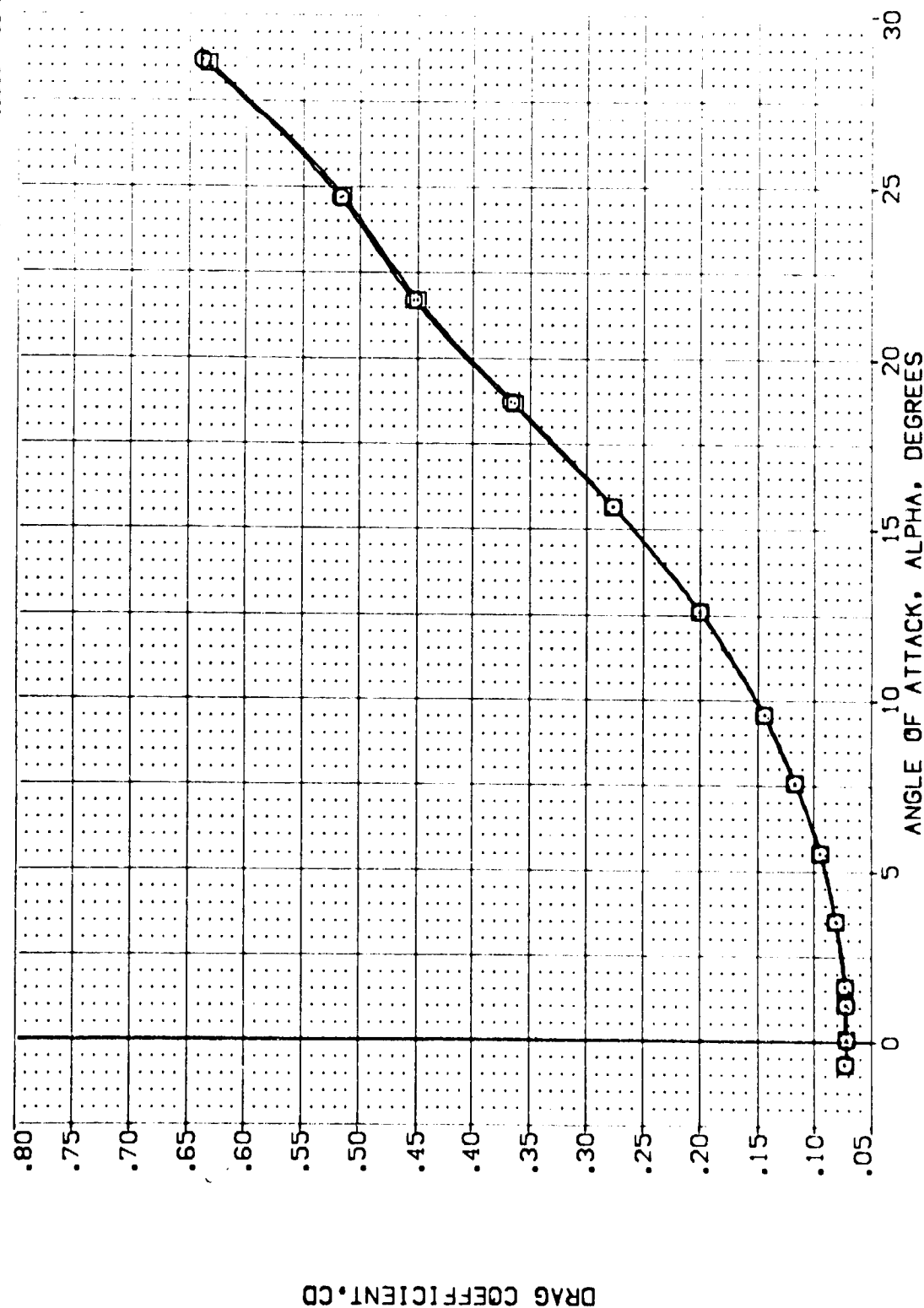


FIG. 6 WING MATRIX

(C)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	BD/LAP	SPDRBK	REFERENCE INFORMATION
{TELJ028}	ARC 11-747 OAS3A B C H F V2 V	.000	.000	.000	25.000	SREF 2.4210 SQ.FT.
{TELJ016}	ARC 11-747 OAS3A B C H F V1 V	.000	.000	.000	25.000	LREF 14.2440 IN.
						BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

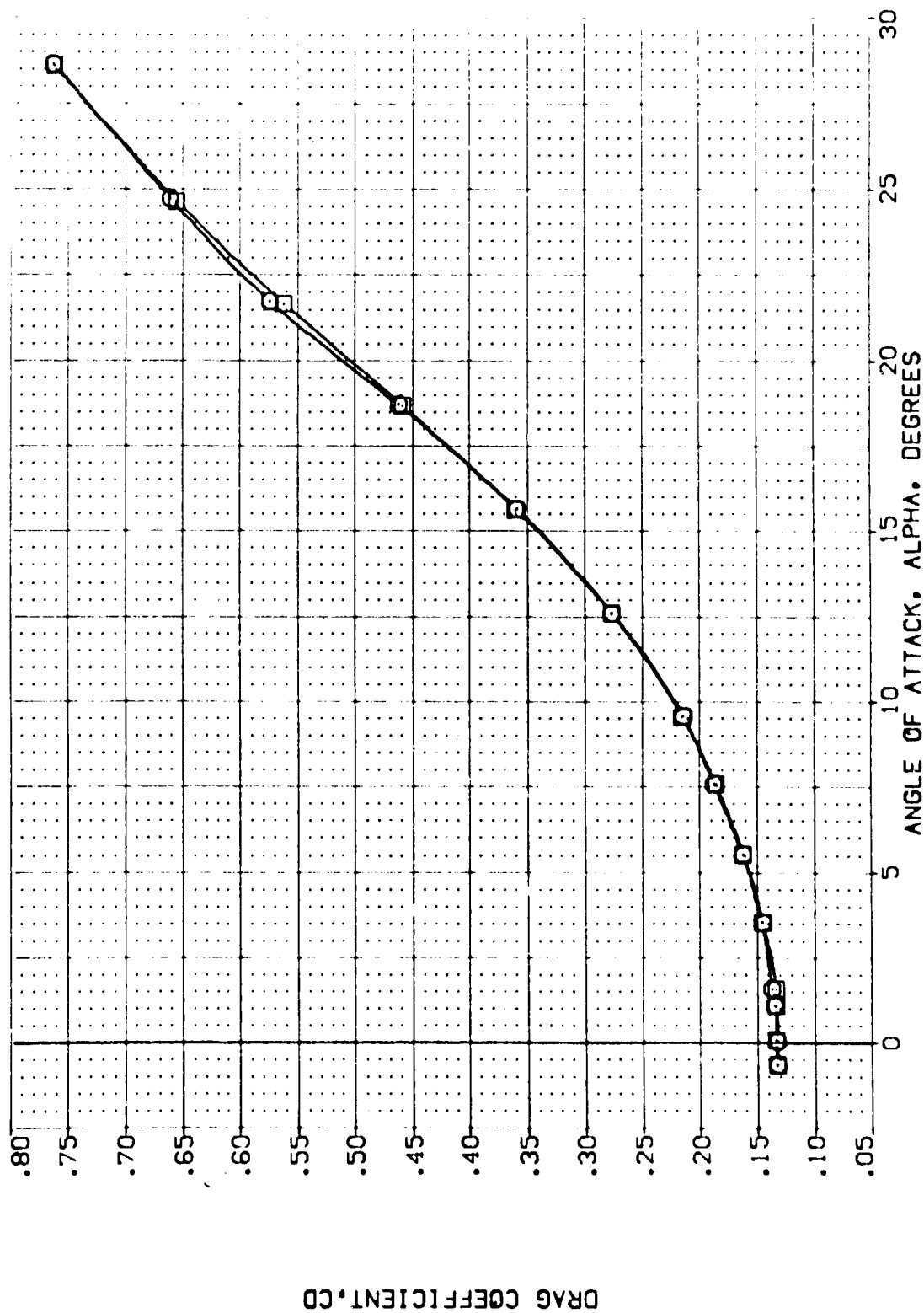


FIG. 6 WING MATRIX  
(0)MACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPDRBK	REFERENCE INFORMATION
(TEJ028)	ARC 11-747 DA53A B C M F V2 V	.000	.000	.000	25.000	SREF 2.4210 SQ.FT.
(TEJ016)	ARC 11-747 DA53A B C M F V1 V	.000	.000	.000	25.000	LREF 14.2440 IN.
						BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

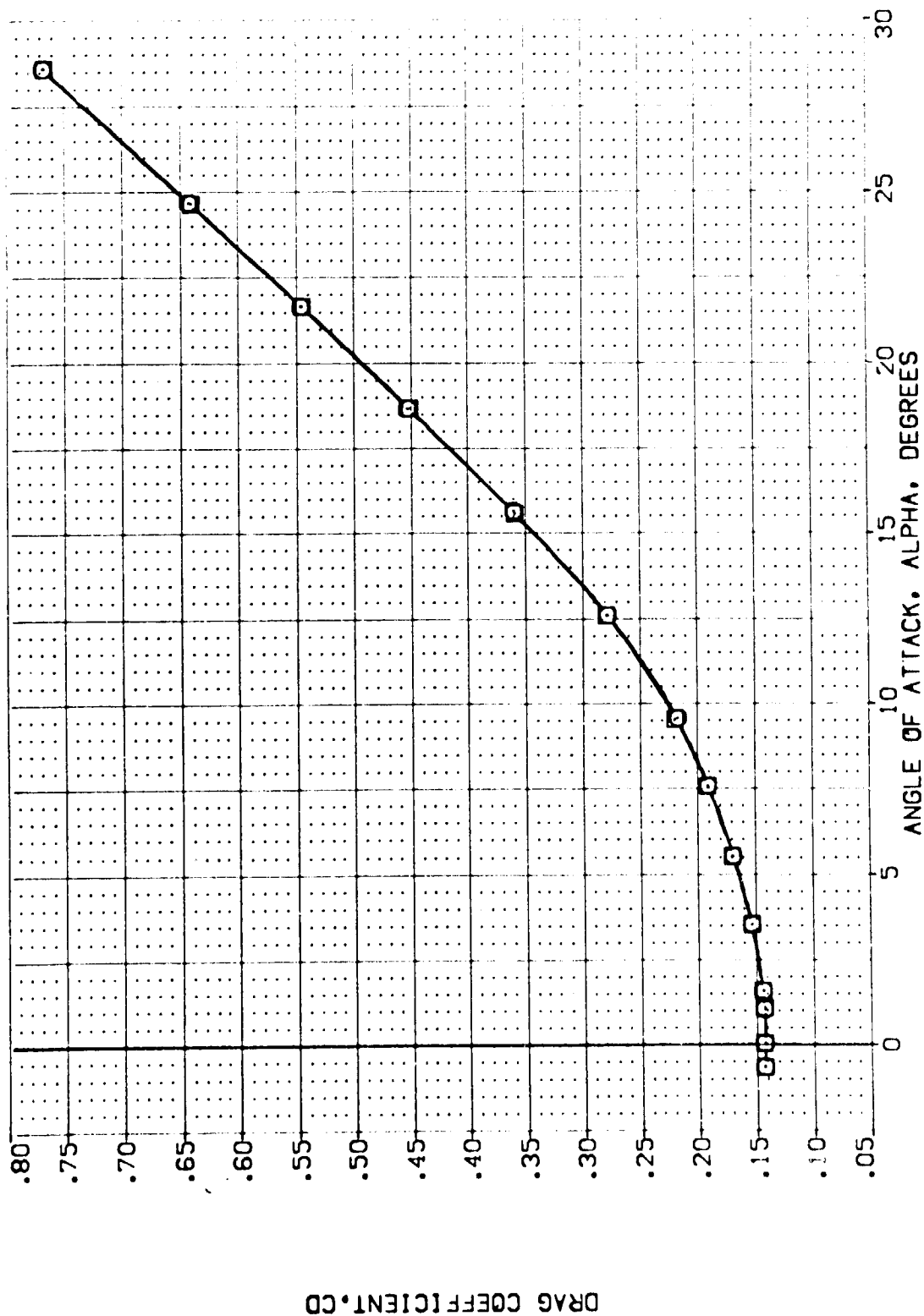


FIG. 6 WING MATRIX

(C)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOE-LAP	SPORRK	REFERENCE INFORMATION
(TEJ0028)	ARC 11-747 DAS3A B C H F V2 V	.000	.000	.000	25.000	SREF 2.4210 SQ.FT.
(TEJ016)	ARC 11-747 DAS3A B C H F V1 V	.000	.000	.000	25.000	LREF 14.2440 IN.
						BREF 28.1004 IN.
						MREF 32.3010 IN.
						YMRP .0000 IN.
						ZMRP .0000 IN.
						SCALE 11.2500 IN.
						SCALE .0300

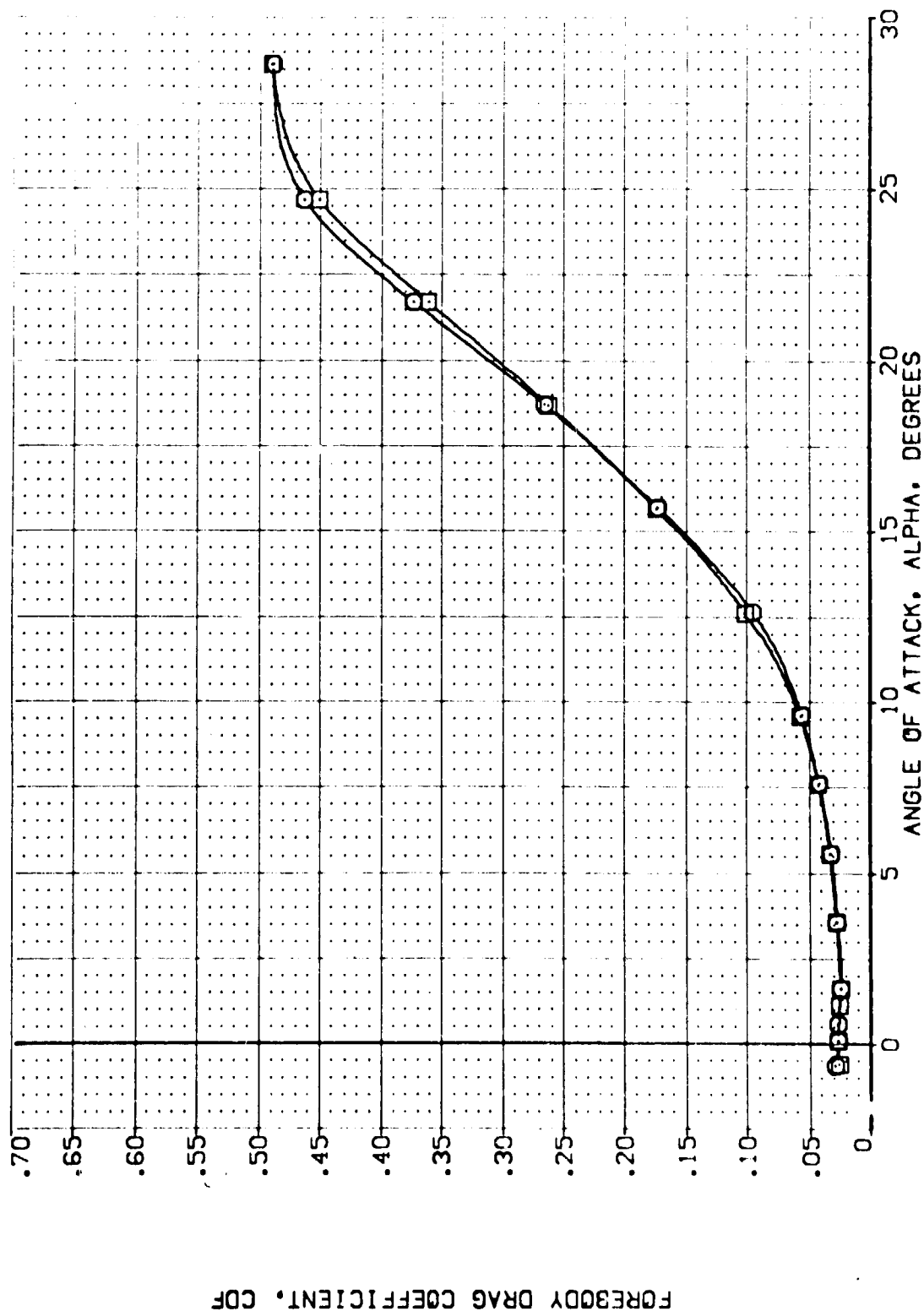


FIG. 6 WING MATRIX

(A)MACH = .60

DATA SET SYMBOL: (1E4028) (1E4016)

CONFIGURATION DESCRIPTION: ARC 11-747 OAS3A B C M F V2 V NOM. RW/L  
 ARC 11-747 OAS3A B C M F V1 V NOM. RW/L

ELEVON: .000 .000

AILERON: .000 .000

BOFLAP: .000 .000

SPDBRK: 25.000 25.000

REFERENCE INFORMATION: SREF 2.4210 SQ.FT.  
 LREF 14.2440 IN.  
 BREF 28.1004 IN.  
 XMRP 32.3010 IN.  
 YMRP 11.0000 IN.  
 ZMRP 11.2500 IN.  
 SCALE .0300

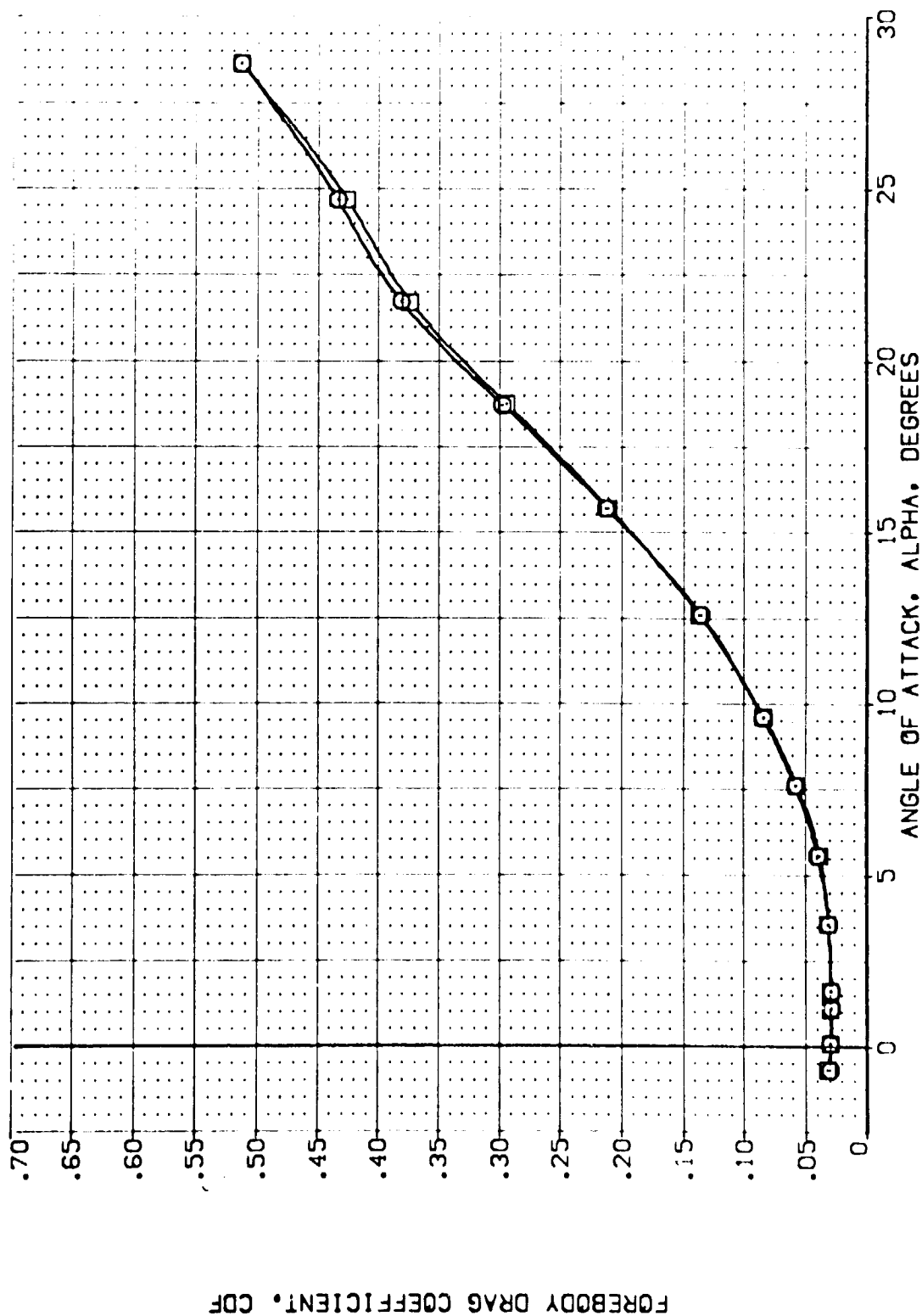


FIG. 6 WING MATRIX

(B)MACH = .80

DATA SET SYMBOL    CONFIGURATION DESCRIPTION  
 (1EJ028)    Q    ARC 11-747 DAS3A B C H F V2 V    NOT: RVUL  
 (1EJ016)    Q    ARC 11-747 DAS3A B C H F V1 V    NOT: RVUL

ELEVON    AILRON    BOFLAP    SPOBRK    REFERENCE INFORMATION  
 .000    .000    .000    25.000    SREF    2.4210    SCALF  
 .000    .000    .000    25.000    LREF    14.2440    SCALF  
 .000    .000    .000    .000    BREF    28.1004    SCALF  
 .000    .000    .000    .000    XREF    32.3010    SCALF  
 .000    .000    .000    .000    YREF    11.2500    SCALF  
 .000    .000    .000    .000    ZREF    11.2500    SCALF  
 .000    .000    .000    .000    SCALE    .3300    SCALE

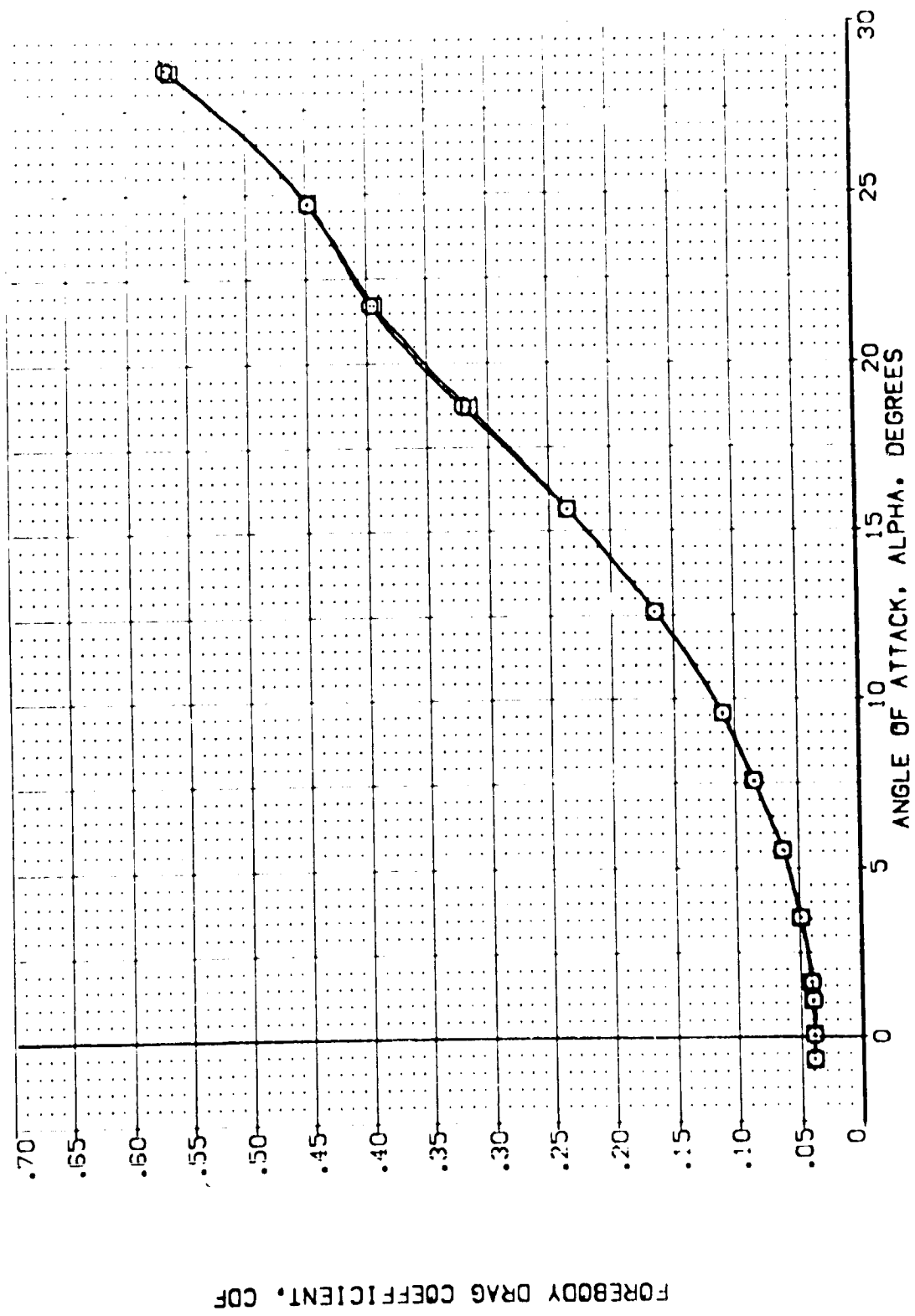


FIG. 6 WING MATRIX

(C)MACH = .90





DATA SET SYMBOL: [ ]  
[TEJ028]  
[TEJ016]

CONFIGURATION DESCRIPTION:  
ARC 11-747 CAS3A B C H F V2 V NON: RV/L  
ARC 11-747 CAS3A B C H F V1 V NON: RV/L

ELEVON: .000 .000 .000  
AIL: .000 .000 .000  
BOFLAP: .000 .000 .000  
SPOBRK: 25.000 25.000 25.000

REFERENCE INFORMATION:  
SPREF: 2.4210 SQ.FT.  
LPREF: 14.2440  
BPREF: 28.1004  
XMPRP: 32.3010  
YMPRP: .0000  
ZMPRP: 11.2500  
SCALE: .0300

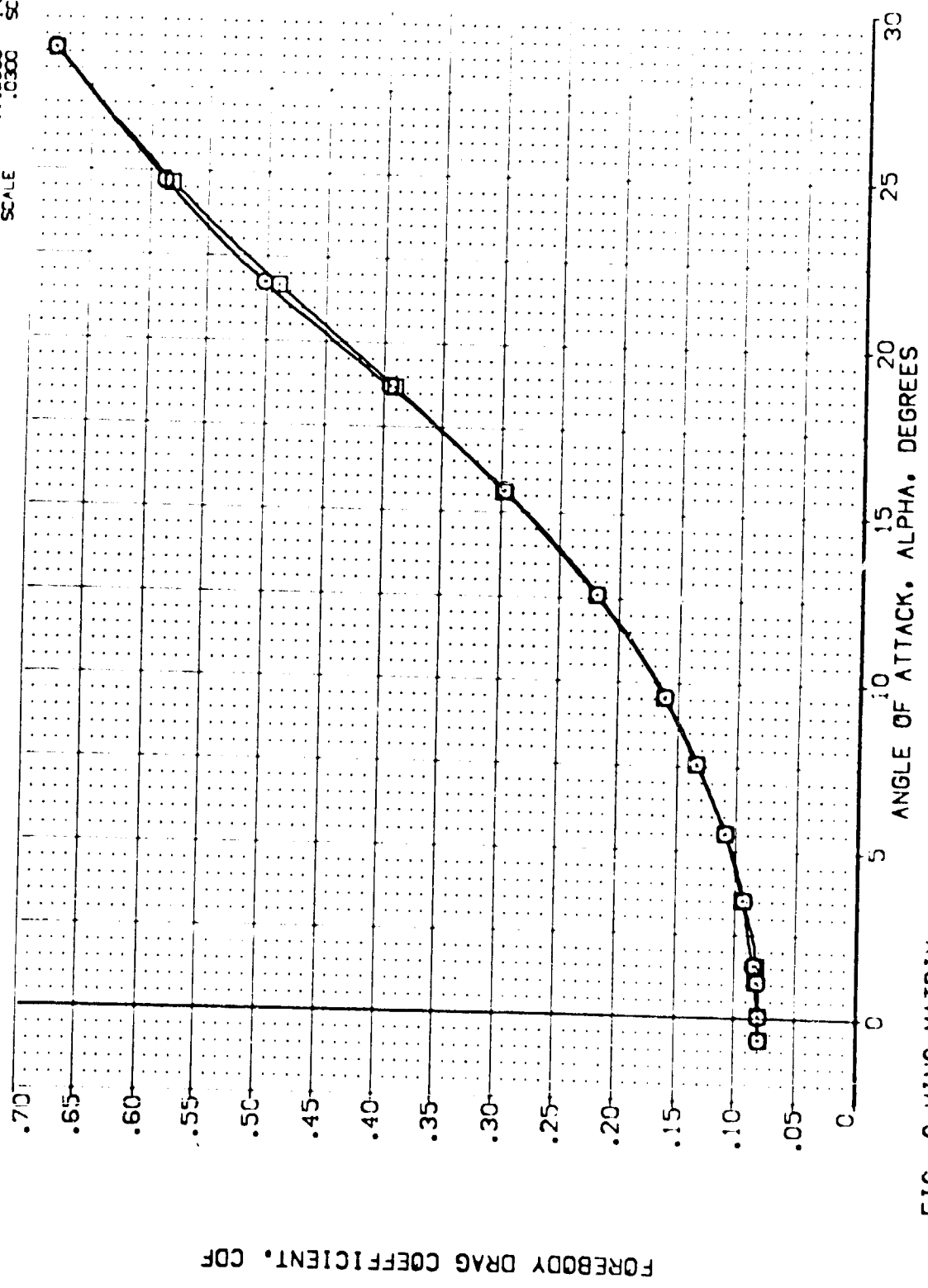


FIG. 6 WING MATRIX

(C)MAC = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPDBRK	REFERENCE INFORMATION
(TEJ028)	ARC 11-747 BASSA B C M F V2 V	.000	.000	.000	25.000	SREF 2.4210 SQ.FT.
(TEJ016)	ARC 11-747 BASSA B C M F V1 V	.000	.000	.000	25.000	LREF 14.2440 IN.
						BREF 28.1004 IN.
						XMRP 32.3016 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300 SCALE

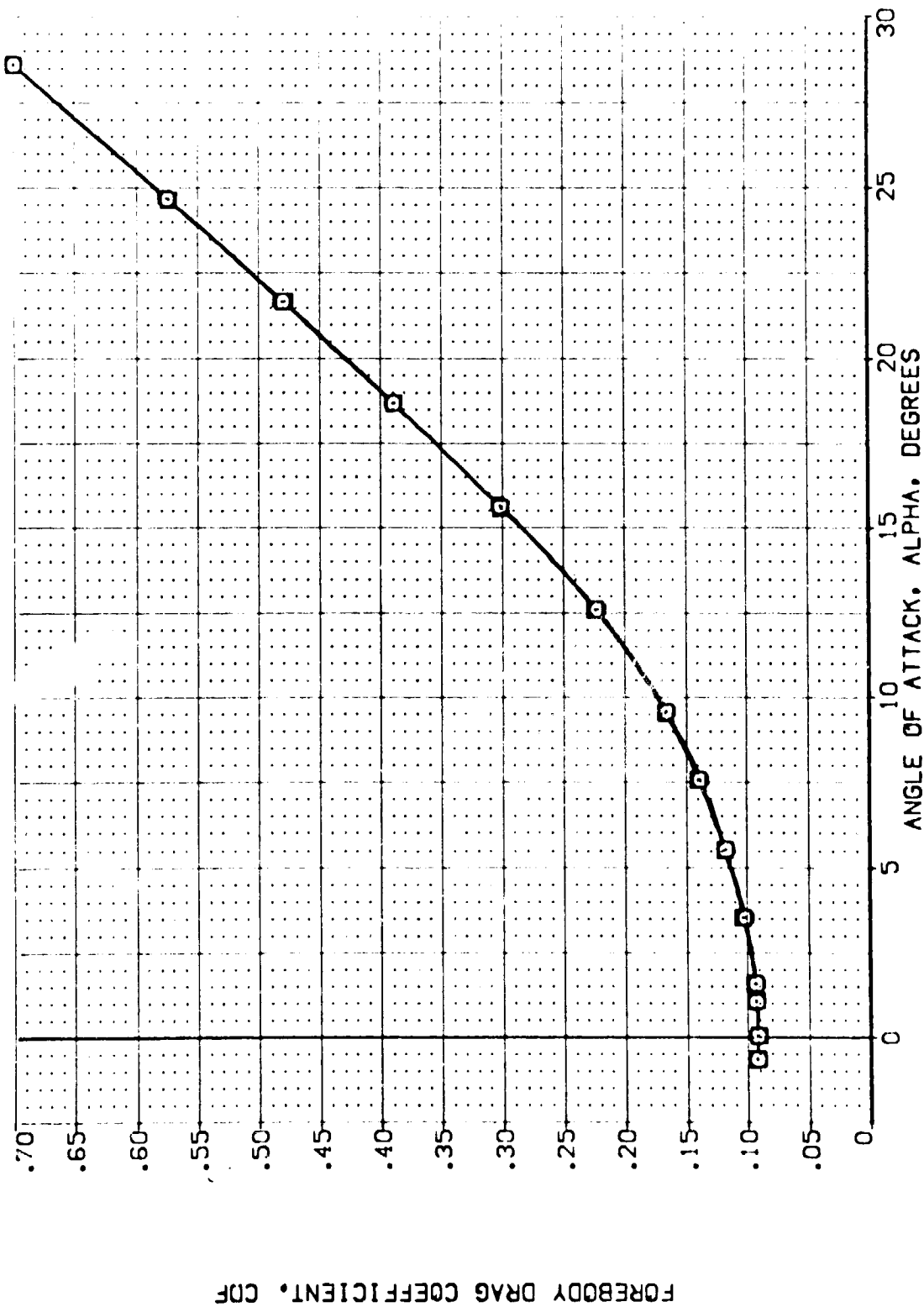


FIG. 6 WING MATRIX

(C)MACH = 1.20

DATA SET SYMBOL: [TEJ028] [TEJ016] [TEJ016]

CONFIGURATION DESCRIPTION: ARC 11-747 D453A B C M F V2 V NOM. RV/L ARC 11-747 D453A B C M F V1 V NOM. RV/L

LEVON: .000 .000 .000

AILERON: .000 .000 .000

BOFLAP: .000 .000 .000

SPOBRK: 25.000 25.000 25.000

REFERENCE INFORMATION: SREF: 2.4210 SQ.FT. LREF: 14.2440 IN. BREF: 28.1004 IN. YMRP: 32.3010 IN. ZMRP: 11.0000 IN. SCALE: 11.2500 .0300

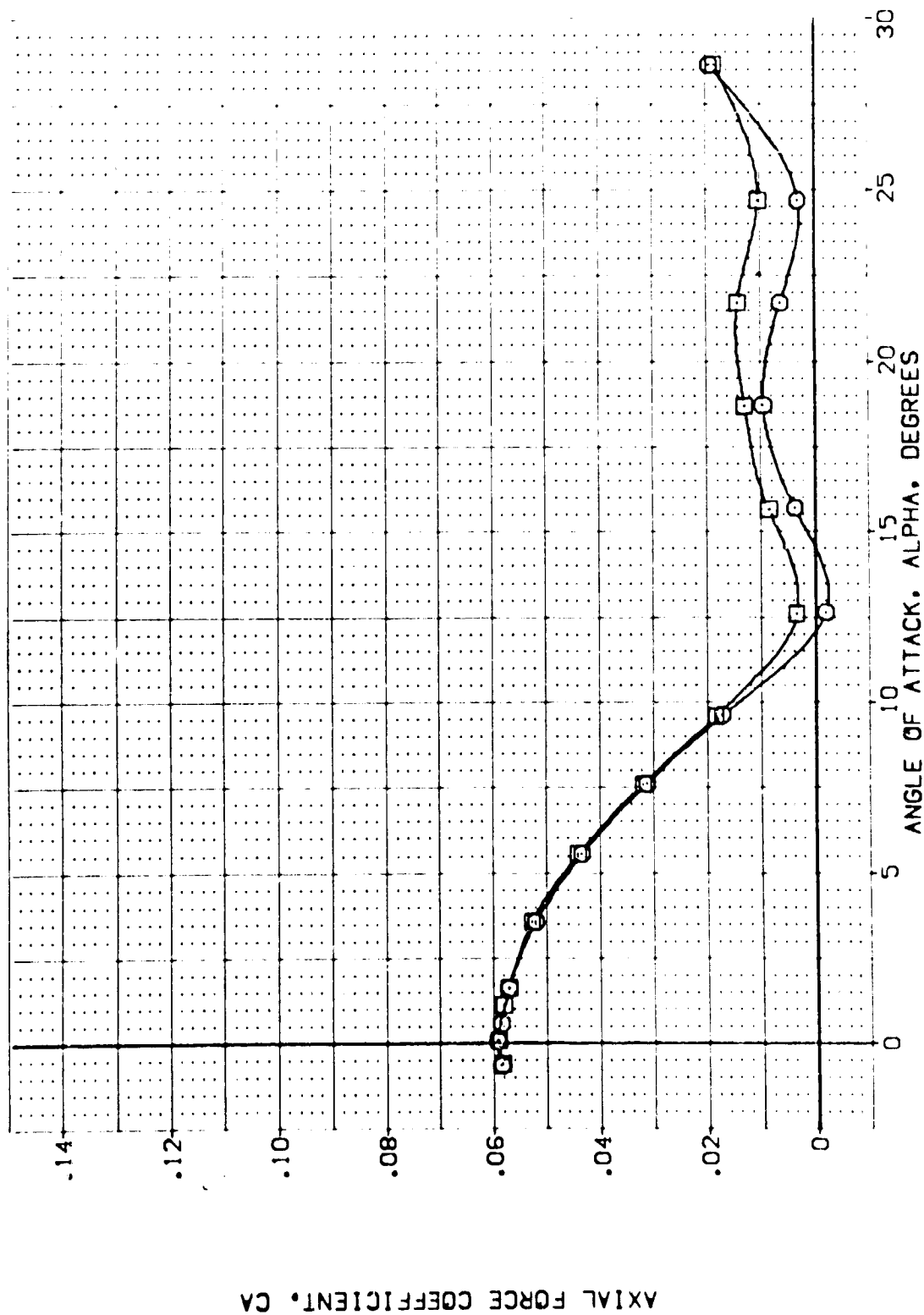


FIG. 6 WING MATRIX

(A)MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPDBRK	REFERENCE INFORMATION
(TEJ028)	ARC 11-747 0A53A B C H F V7 V	.000	.000	.000	25.000	SREF 2.4210 SQ.FT.
(TEJ016)	ARC 11-747 0A53A B C H F V1 V	.000	.000	.000	25.000	LREF 14.2440 IN.
						BREF 28.1004 IN.
						XPRP 32.3010 IN.
						YPRP .0000 IN.
						ZPRP 11.2500 IN.
						SCALE .0300

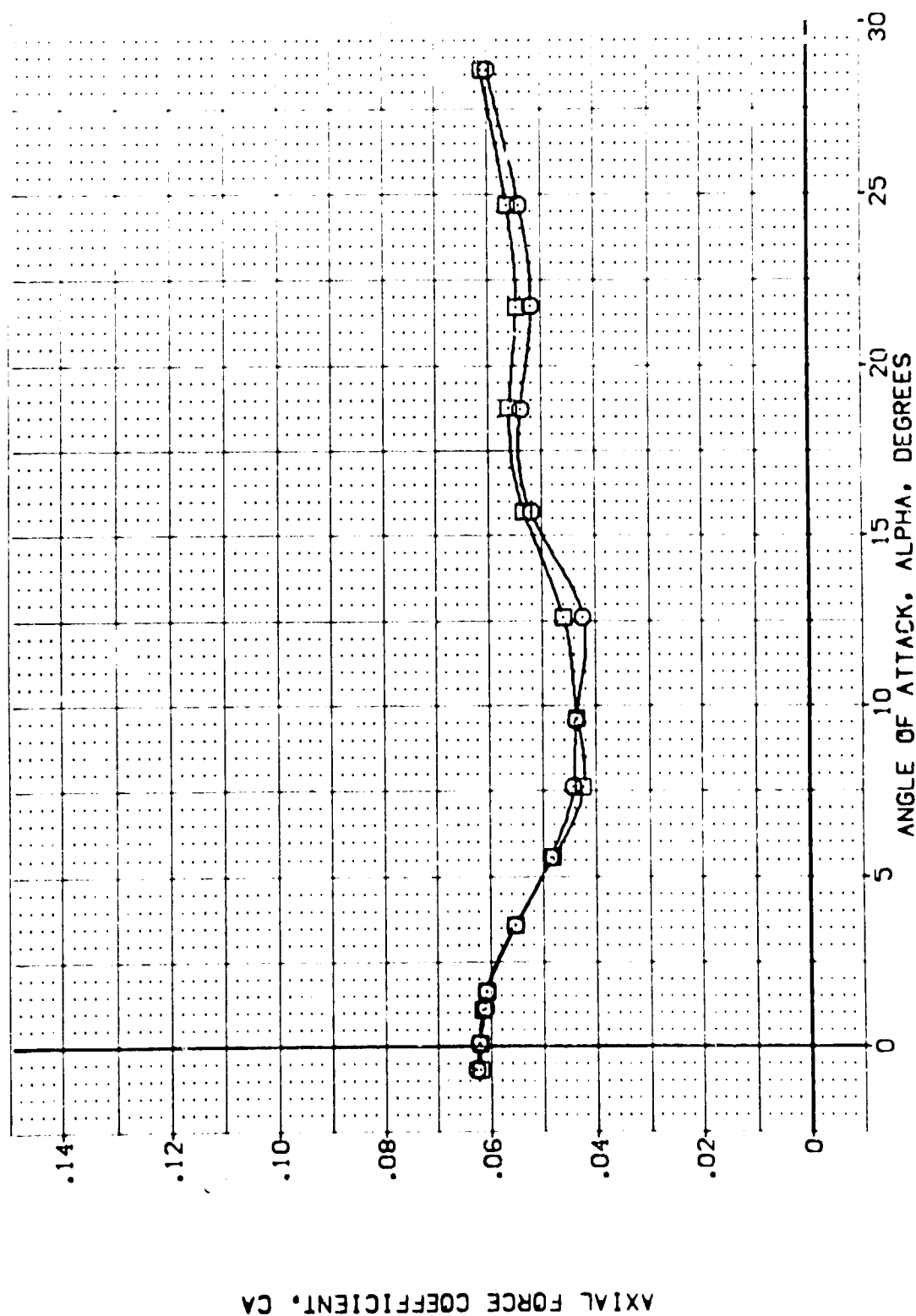


FIG. 6 WING MATRIX  
(B)MACH = .80



DATA SET SYMBOL: (TEJ008) (TEJ016) CONFIGURATION DESCRIPTION: ARC 11-747 BASSA B C M F V2 V NOM: RVUL ARC 11-747 BASSA B C M F V1 V NOM: RVUL

ELEVON	AILERON	EDFLAP	SPDBRK
.000	.000	.000	25.000
.000	.000	.000	25.000

REFERENCE INFORMATION:  
SREF: 2.4210 SQ.FT.  
LREF: 14.2440 IN.  
BREF: 28.1004 IN.  
XMRP: 32.3010 IN.  
YMRP: .0000 IN.  
ZMRP: 11.2500 IN.  
SCALE: .0300

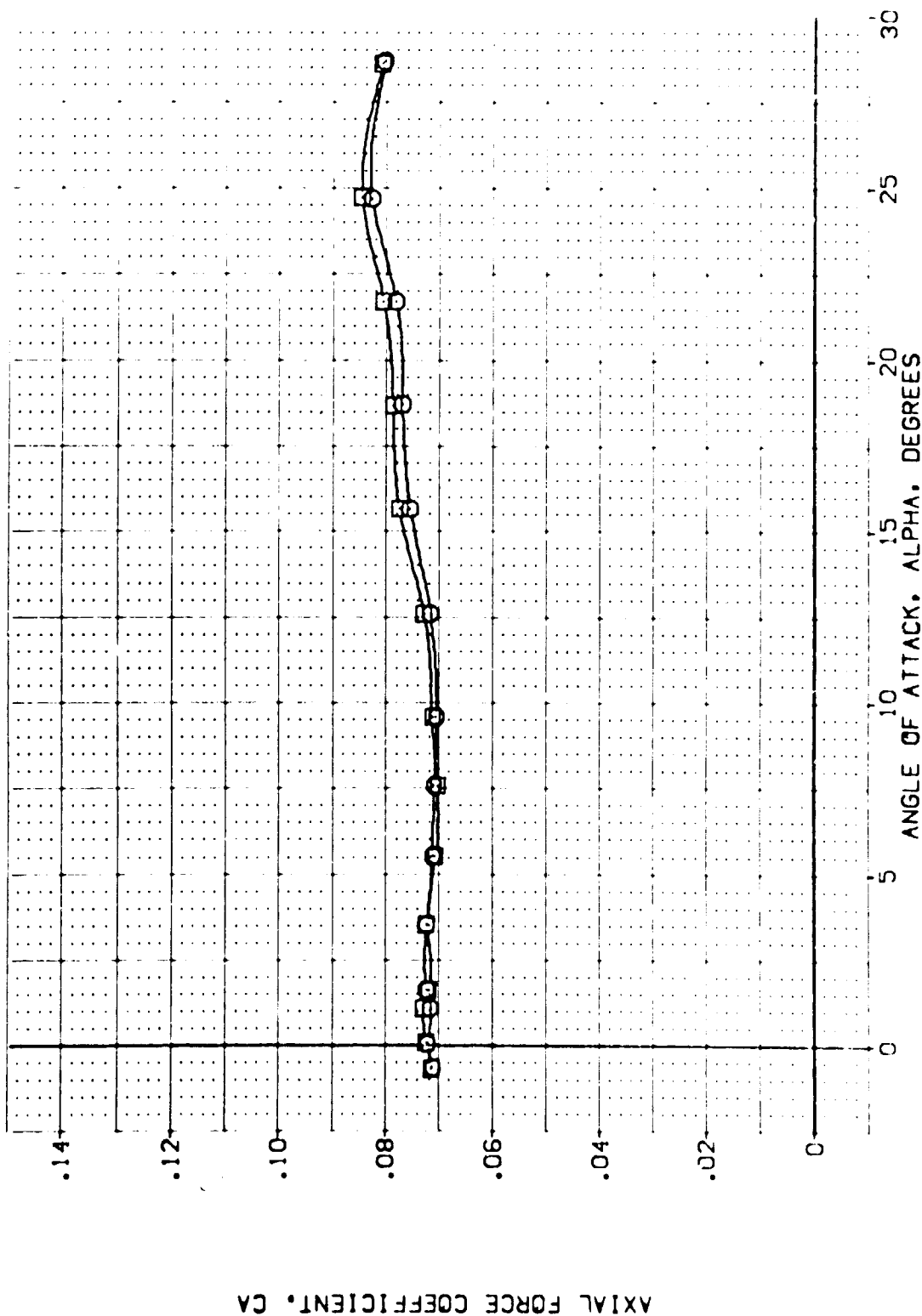


FIG. 6 WING MATRIX  
(C)MACH = .90

DATA SET SYMBOL		CONFIGURATION DESCRIPTION		ELEVON		AILERON		BOFLAP		SPOILER		REFERENCE INFORMATION	
:TEJ028)		ARC 11-747 QAS3A B C M F V2 V		.000		.000		.000		25.000		2.4210 SQ.FT.	
:TEJ016)		ARC 11-747 QAS3A B C M F V1 V		.000		.000		.000		25.000		14.2440 IN.	
												28.1004 IN.	
												32.3010 IN.	
												11.2500 IN.	
												.0300 SCALE	

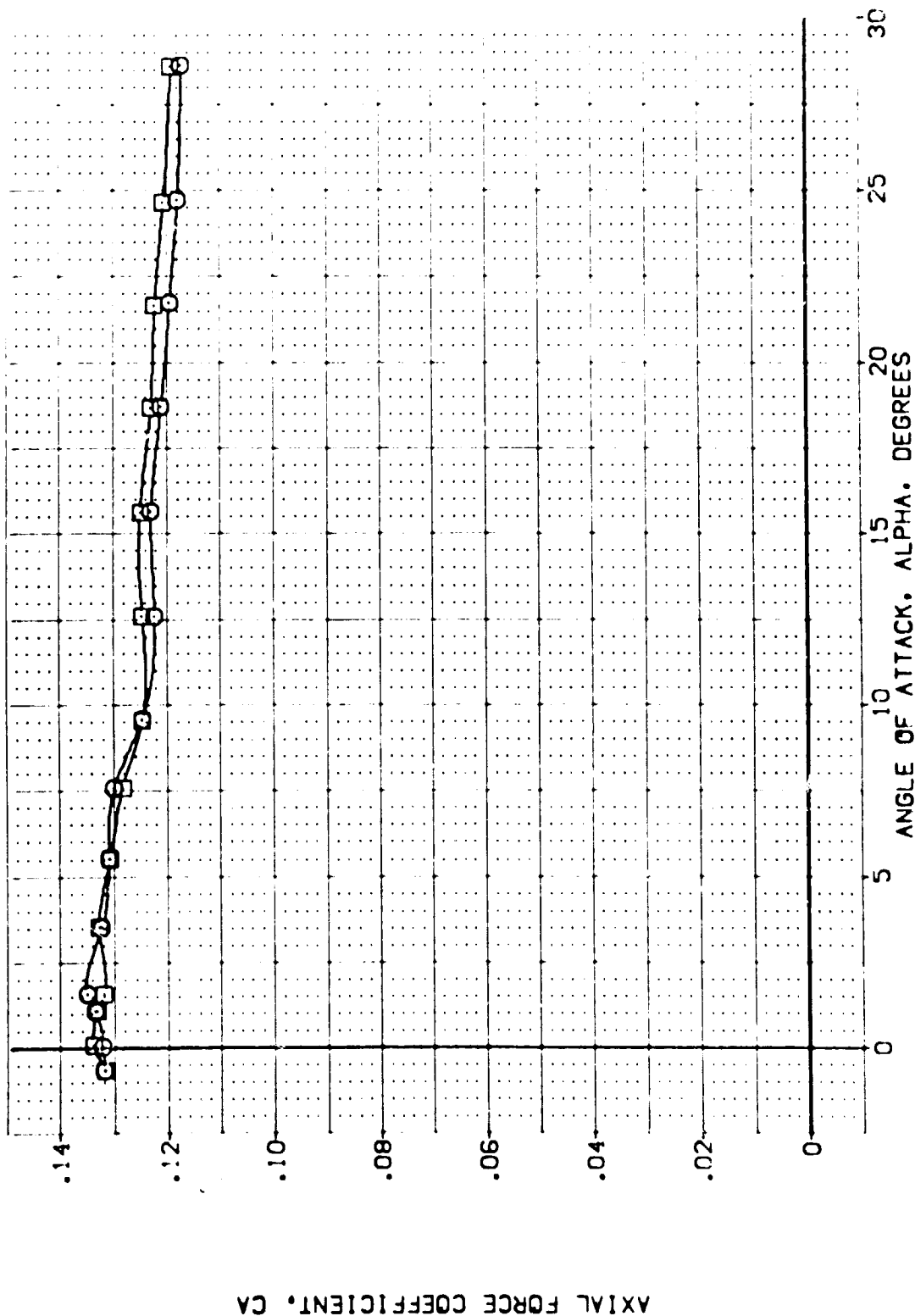


FIG. 6 WING MATRIX

(D)MACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPDRBK	REFERENCE INFORMATION
{TEJ028}	ARC 11-747 OAS3A B C H F V2 V	.000	.000	.000	25.000	SREF 2.4210 SQ.FT.
{TEJ016}	ARC 11-747 OAS3A B C H F V1 V	.000	.000	.000	25.000	LREF 14.2440 IN.
						BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

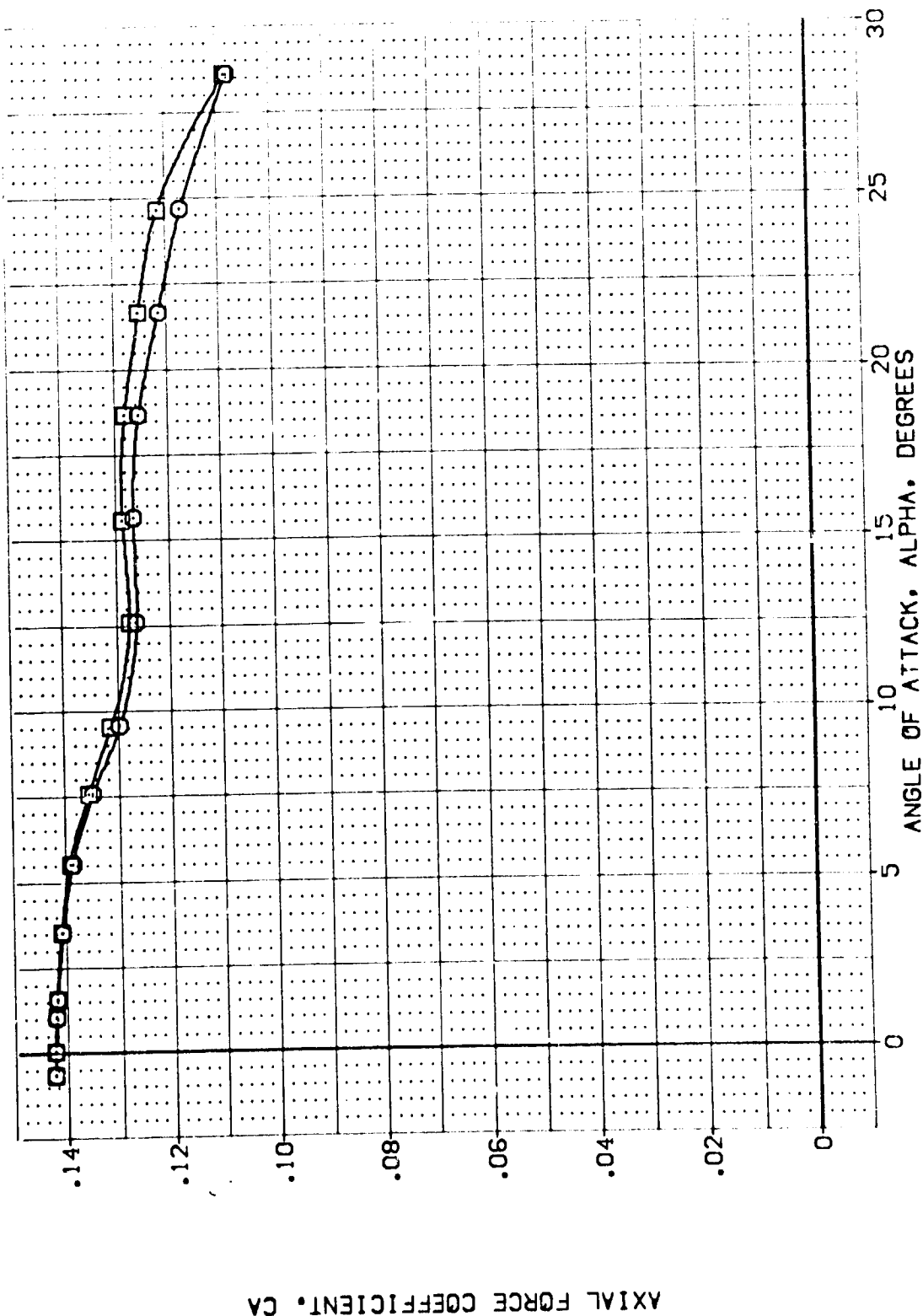


FIG. 6 WING MATRIX  
(M)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	EDFLAP	SPOILER	REFERENCE INFORMATION
(TEJ028)	ARC 11-747 DA53A B C M F V2 V	.000	.000	.000	25.000	SREF 2.4210 SQ.FT.
(TEJ016)	ARC 11-747 DA53A B C M F V1 V	.000	.000	.000	25.000	LREF 14.2440 IN.
						BREF 28.1004 IN.
						YMRP 32.3010 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

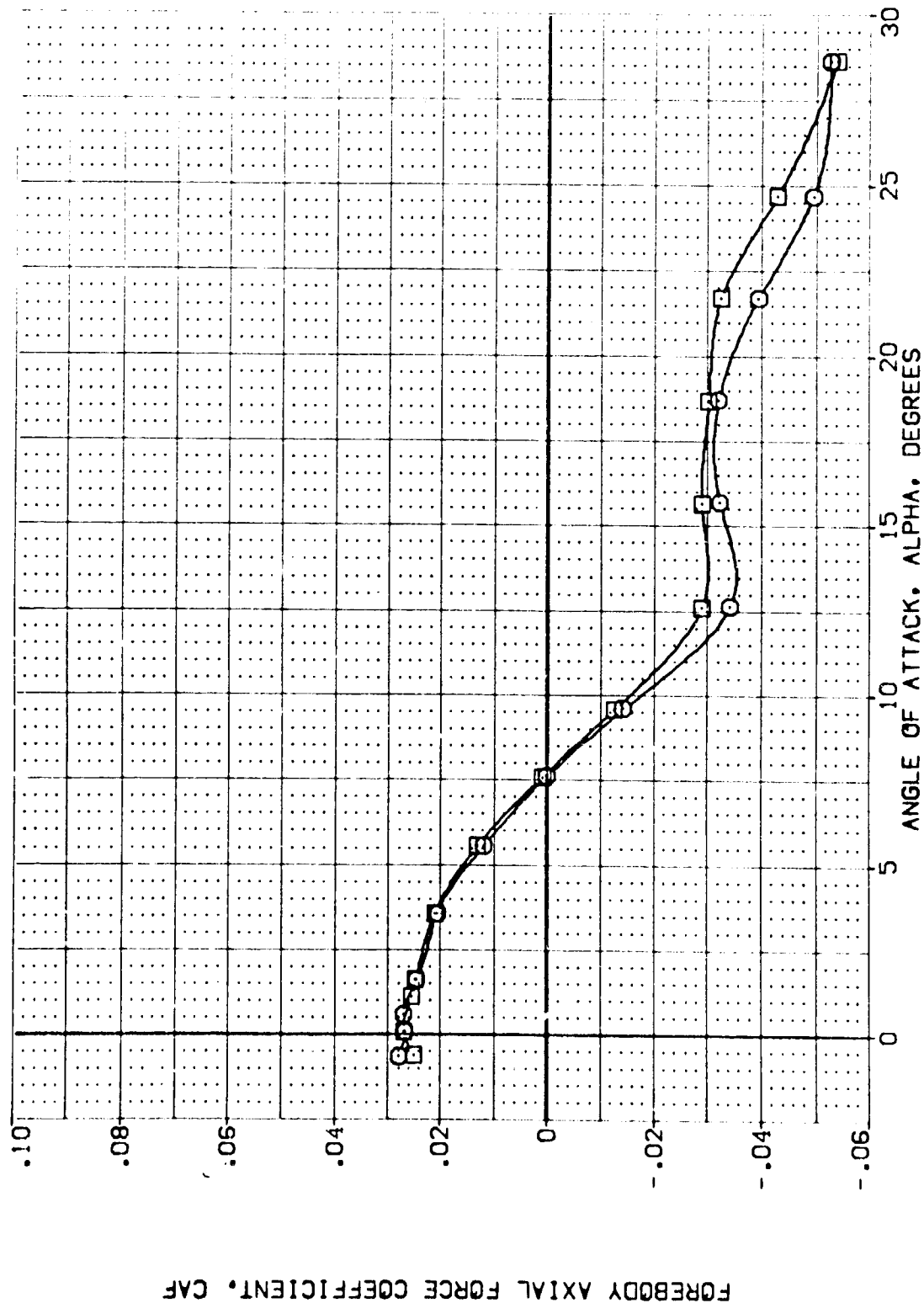


FIG. 6 WING MATRIX

(A) MACH = .60







DATA SET SYMBOL: [TEJ028] [TEJ016]  
CONFIGURATION DESCRIPTION: ARC 11-747 OAS3A B C H F V2 V NDH, RV/L  
ELEVON: .000 .000 AILRON: .000 .000 BOFLAP: .000 .000 SPOBRK: 25.000 25.000  
REFERENCE INFORMATION: SREF: 2.4210 SQ.FT. LREF: 14.2440 IN. BREF: 28.1004 IN. XMRP: 32.3010 IN. YMRP: .0000 IN. ZMRP: 11.2500 IN. SCALE: .0300

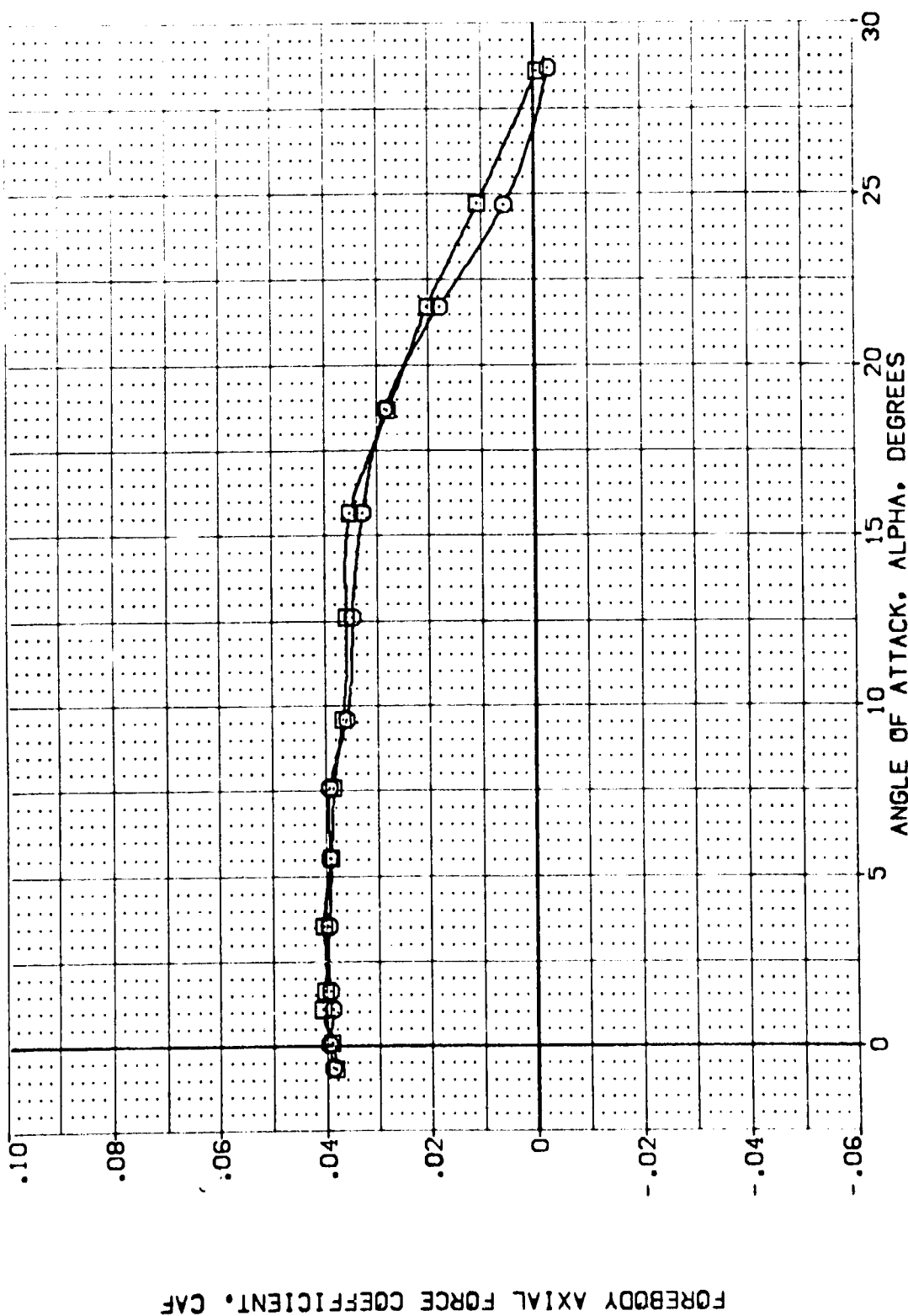


FIG. 6 WING MATRIX  
(C)MACH = .90

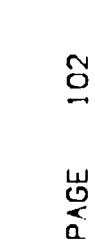


FIG. 6 WING MATRIX  
COMACH = 1.05

DATA SET SYMBOL: (TEJ028) (TEJ016)

CONFIGURATION DESCRIPTION: ARC 11-747 BAS3A B C M F V2 V NOM: RV/L ARC 11-747 BAS3A B C M F V1 V NOM: RV/L

ELEVON: .000 .000 .000

AILERON: .000 .000 .000

BOFLAP: .000 .000 .000

SPODBRK: 25.000 25.000

REFERENCE INFORMATION:

SREF	2.4210	SO.FT.
LREF	14.2440	IN.
BREF	28.1004	IN.
XMRP	32.3010	IN.
YMRP	11.2500	IN.
ZMRP	11.0300	IN.
SCALE		

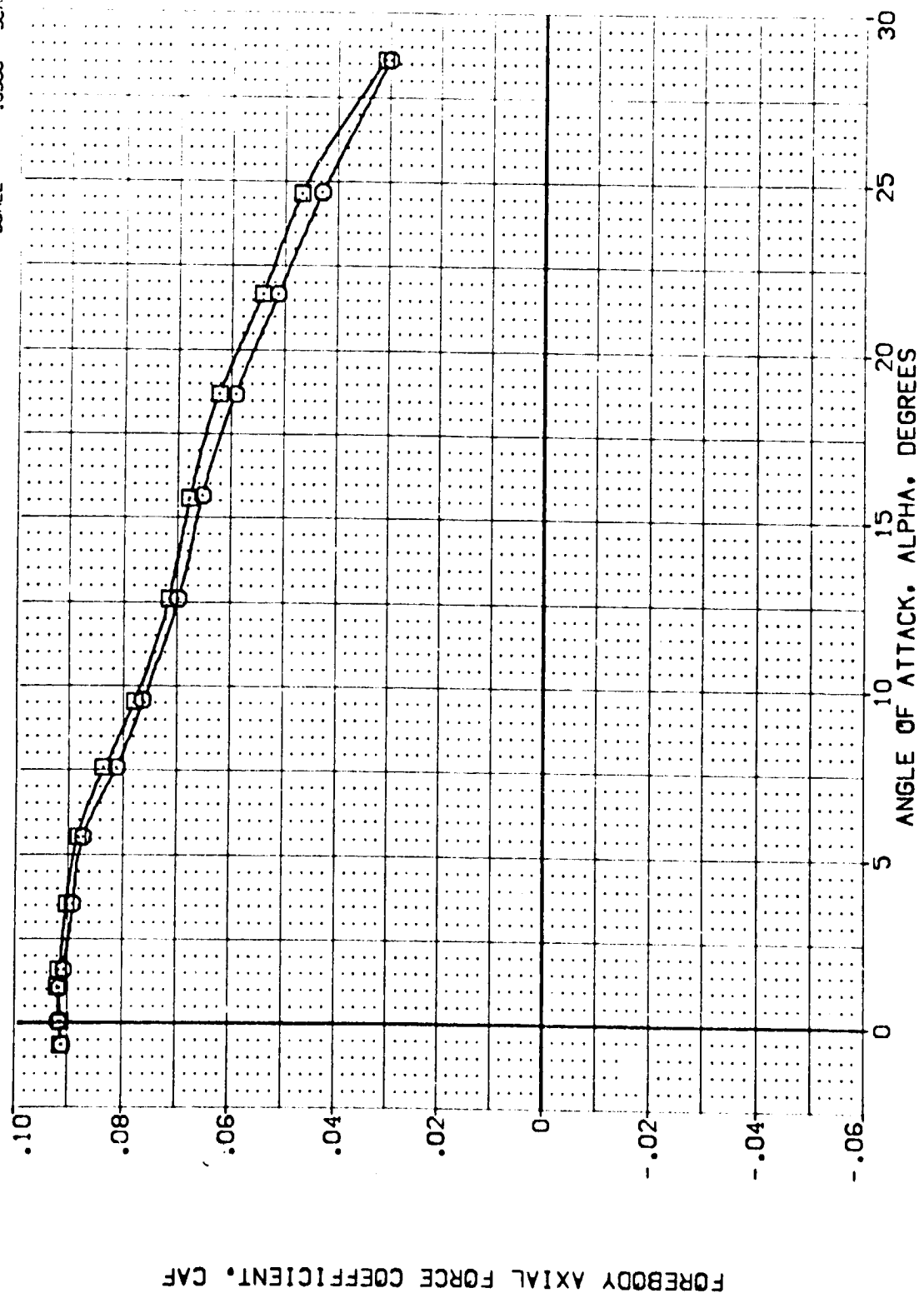


FIG. 6 WING MATRIX

(E)MACH = 1.20

DATA SET SYMBOL: (TEJ028) (TEJ016)

CONFIGURATION DESCRIPTION: ARC 11-747 BA53A B C M F V2 V NOM: RV/L ARC 11-747 BA53A B C M F V1 V NOM: RV/L

ELEVON: .000 .000 .000 .000 .000 .000

AILERON: .000 .000 .000 .000 .000 .000

BDCLAP: .000 .000 .000 .000 .000 .000

SP00BK: 25.000 25.000 25.000 25.000 25.000 25.000

REFERENCE INFORMATION:

	2.4210	50. FT.
SREF	2.4210	50. FT.
LREF	14.2440	
BREF	28.1004	
XMRP	32.3010	
YMRP	.0000	
ZMRP	11.2500	
SCALE	.0300	

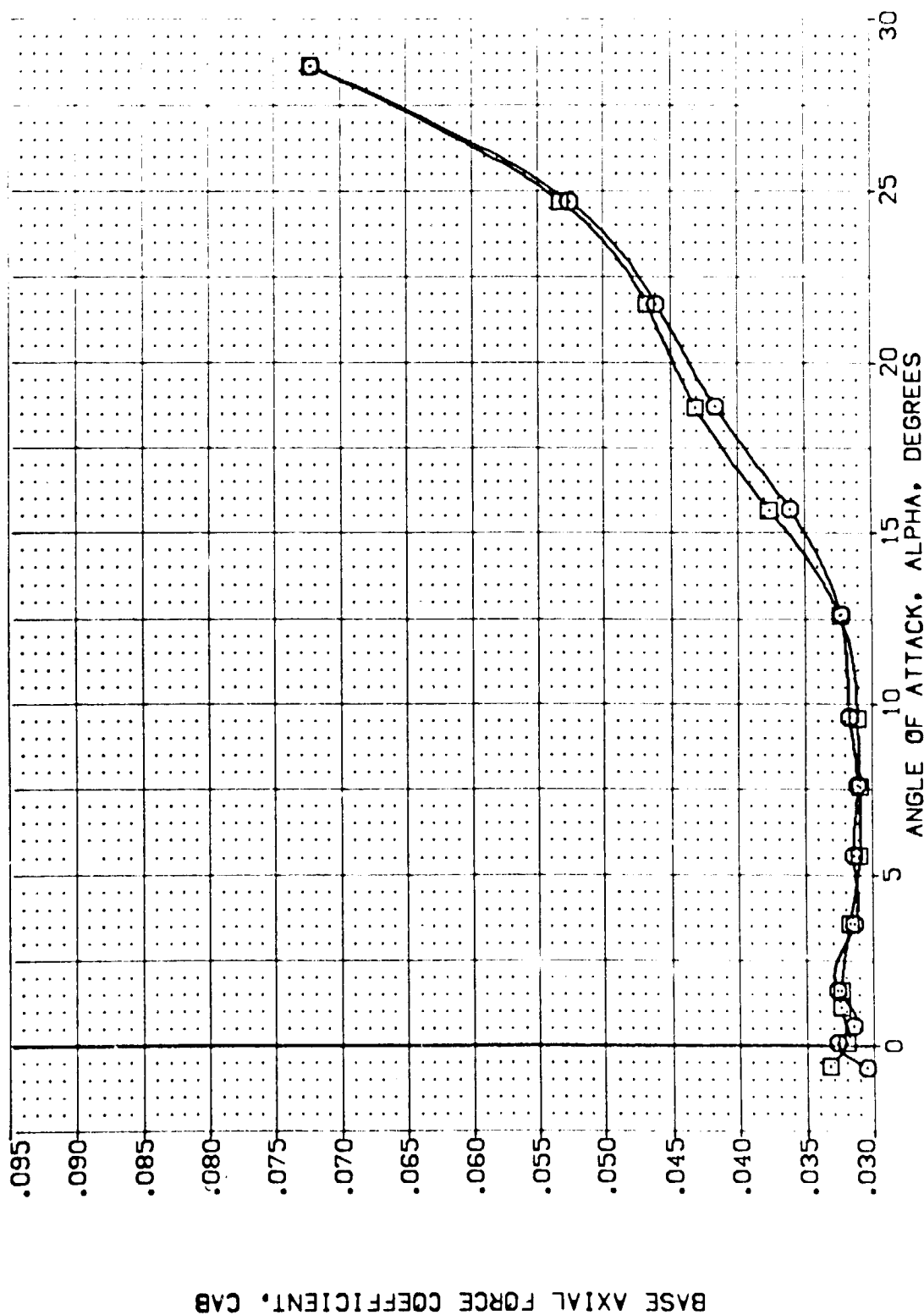


FIG. 6 WING MATRIX

(A)MACH = .60



DATA SET SYMBOL: [ ]  
 [TEJ028]  
 [TEJ016]

CONFIGURATION DESCRIPTION:  
 ARC 11-747 DAS3A B C H F V2 V  
 ARC 11-747 DAS3A B C H F V1 V

ELEVON: .000  
 AILERON: .000  
 BDF LAP: .000  
 SPDRK: 25.000  
 25.000

REFERENCE INFORMATION:  
 SREF: 2.4210 SQ.FT.  
 LREF: 14.2440 IN.  
 BREF: 28.1004 IN.  
 XMRP: 32.3010 IN.  
 YMRP: 11.0000 IN.  
 ZMRP: 11.2500 IN.  
 SCALE: .0300

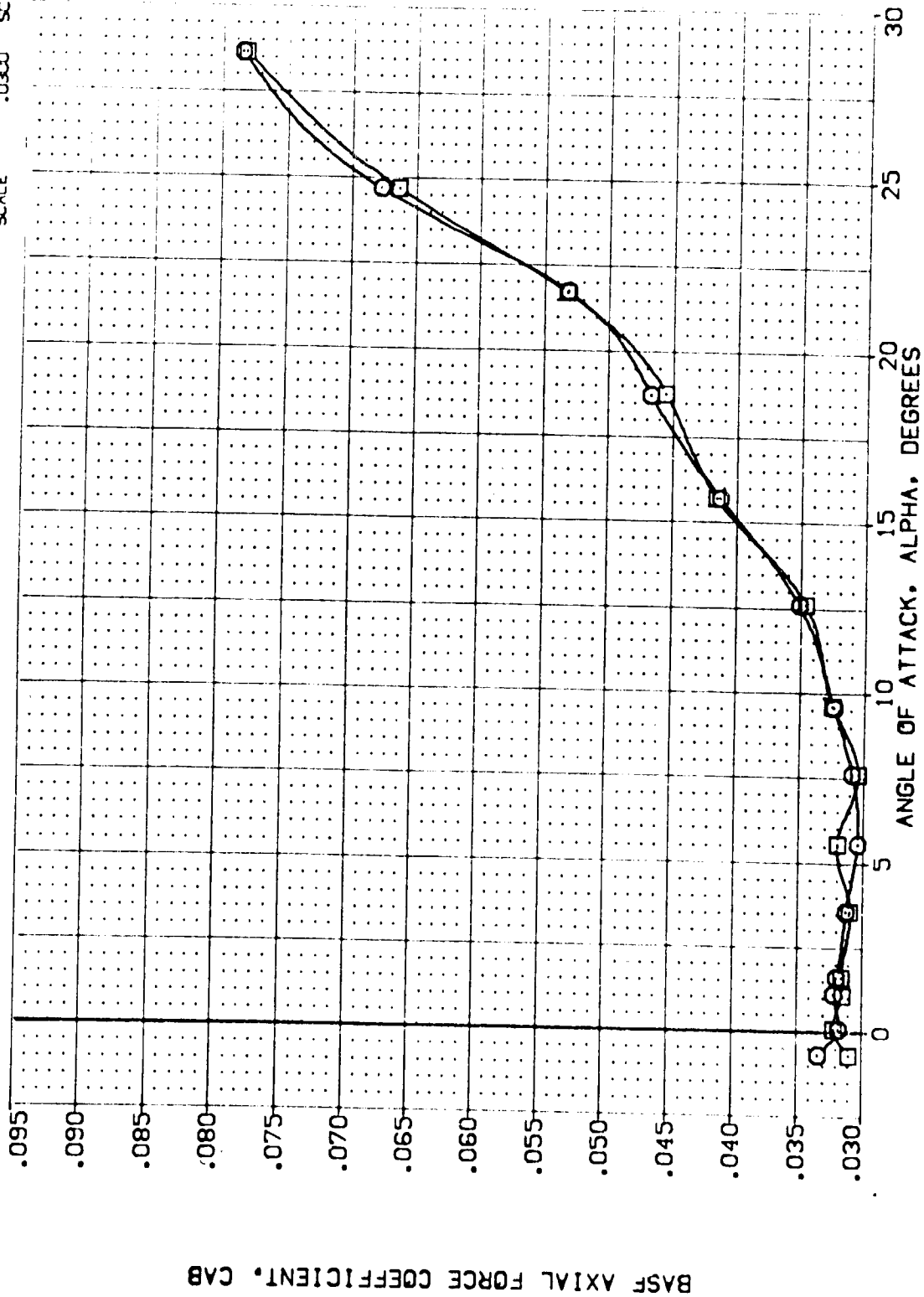


FIG. 6 WING MATRIX

(B)MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPDRBK	REFERENCE INFORMATION
(TEJ028)	ARC 11-747 0A53A B C M F V2 V	.000	.000	.000	25.000	SREF 2.4210 50.F.T.
(TEJ016)	ARC 11-747 0A53A B C M F V1 V	.000	.000	.000	25.000	LREF 14.2140 11.
						BREF 28.1004 11.
						XMREF 32.3010 11.
						YMREF 11.2500 11.
						ZMREF .0300 SCALE

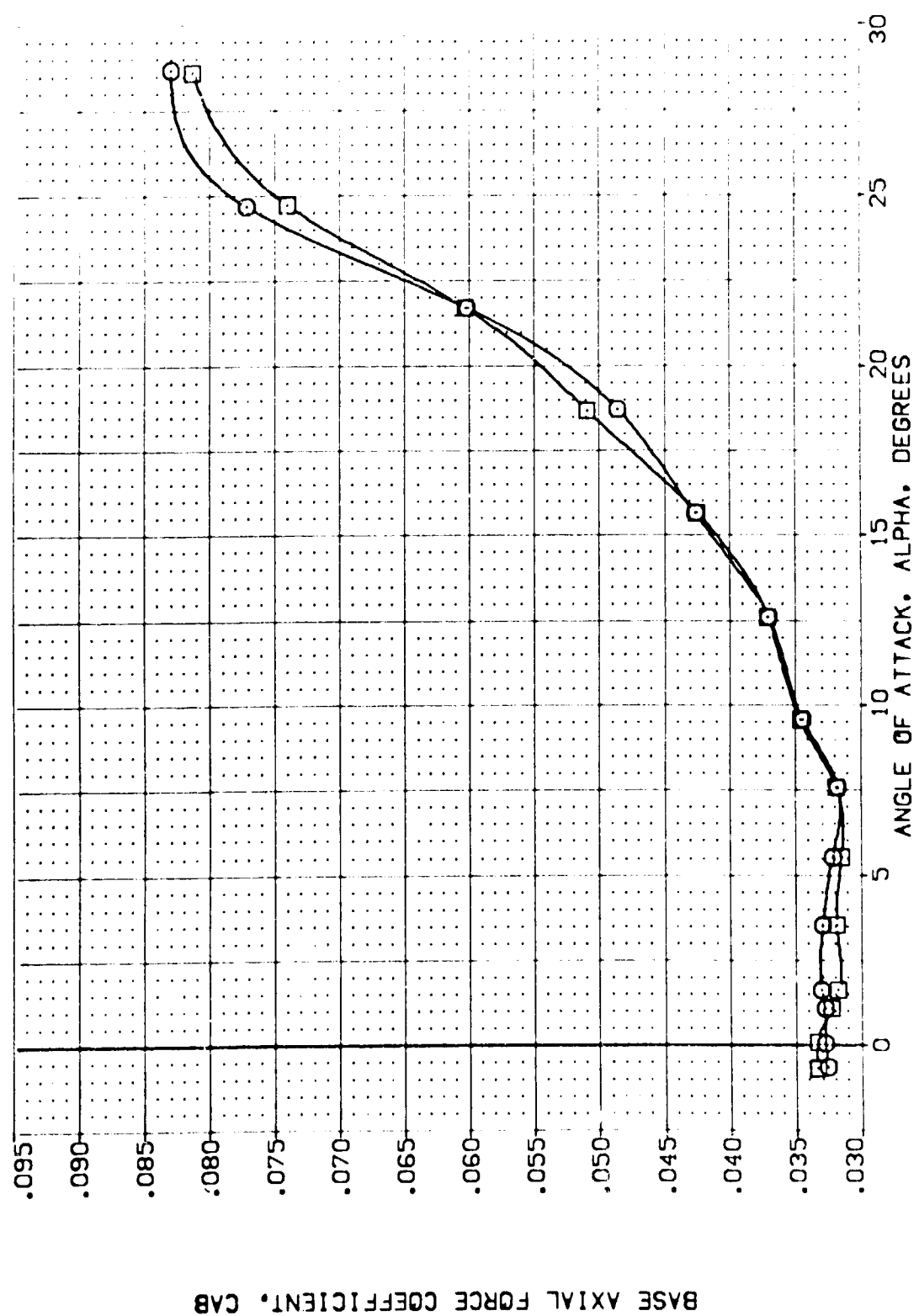


FIG. 6 WING MATRIX

(CMACH = .90



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPOILER	REFERENCE INFORMATION
(TEJ028)	ARC 11-747 DA53A B C M F V2 V	.000	.000	.000	25.000	SREF 2.4210 SQ.FT.
(TEJ028)	ARC 11-747 DA53A B C M F V1 V	.000	.000	.000	25.000	LREF 14.2440 IN.
						BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

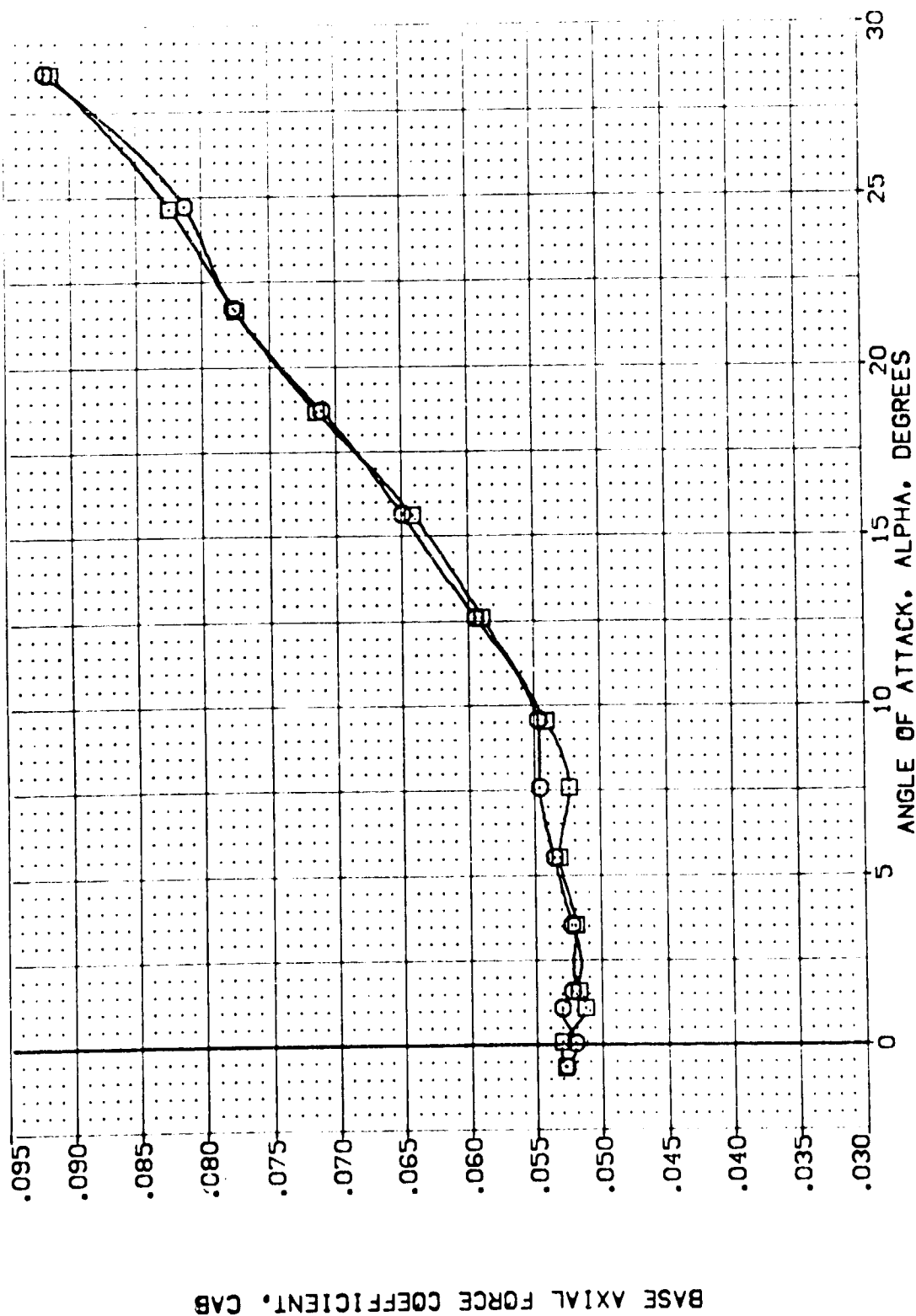


FIG. 6 WING MATRIX  
(D)MACH = 1.05





DATA SET SYMBOL: (TEJ028) (TEJ016)

CONFIGURATION DESCRIPTION:  
 ARC 11-747 0A53A B C M F V2 V  
 ARC 11-747 0A53A B C M F V1 V

ELEVON: .000 .000  
 AILERON: .000 .000  
 BDFLAP: .000 .000  
 SPODBK: 25.000 25.000

REFERENCE INFORMATION:  
 SREF: 2.4210 SQ.FT.  
 LREF: 14.2440 IN.  
 BREF: 78.1004 IN.  
 XMRP: 32.3010 IN.  
 YMRP: .0000 IN.  
 ZMRP: 11.2500 IN.  
 SCALE: .0300

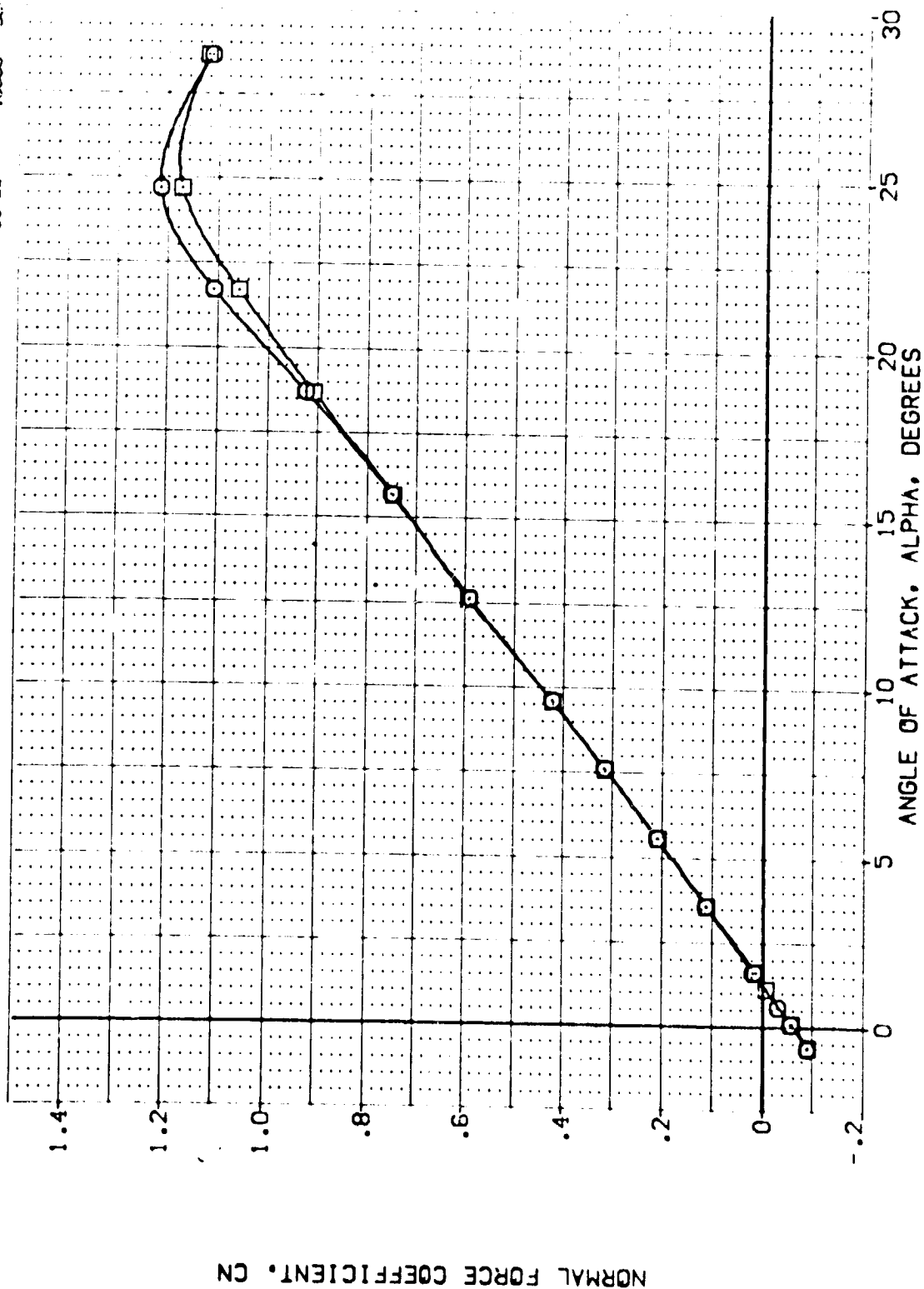


FIG. 6 WING MATRIX

(MACH = .60)

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPOILER	REFERENCE INFORMATION
(TEJ078)	ARC 11-747 0A53A B C H F V2 V	.000	.000	.000	25.000	SREF 2.4210 SQ.FT.
(TEJ016)	ARC 11-747 0A53A B C H F V1 V	.000	.000	.000	25.000	LREF 14.2440 IN.
						BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

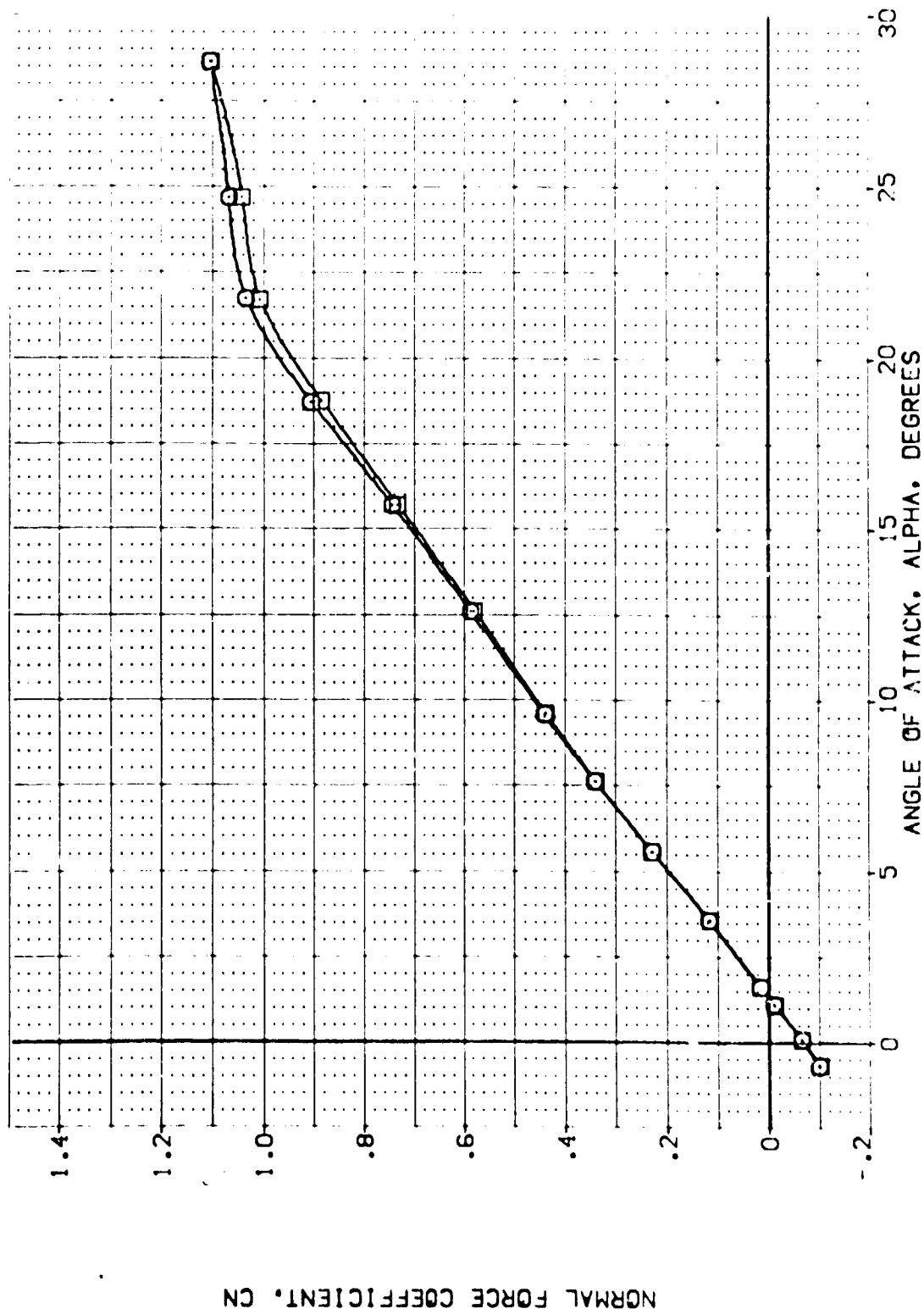


FIG. 6 WING MATRIX

(B)MACH = .80

DATA SET SYMBOL	CONF IGURATION DESCRIPTION	ELEVON	AIRLON	BOFLAP	SPOBRK	REFERENCE INFORMATION
(TEJ028)	ARC 11-747 DA53A B C M F V2 V NMH: RNVL	.000	.000	.000	25.000	SREF 2.4210 SQ.FT.
(TEJ016)	ARC 11-747 DA53A B C M F V1 V NMH: RNVL	.000	.000	.000	25.000	LREF 14.2440
						BREF 28.1004
						XMR0 32.3010
						YMR0 .0000
						ZMR0 11.2500
						SCALE .0300

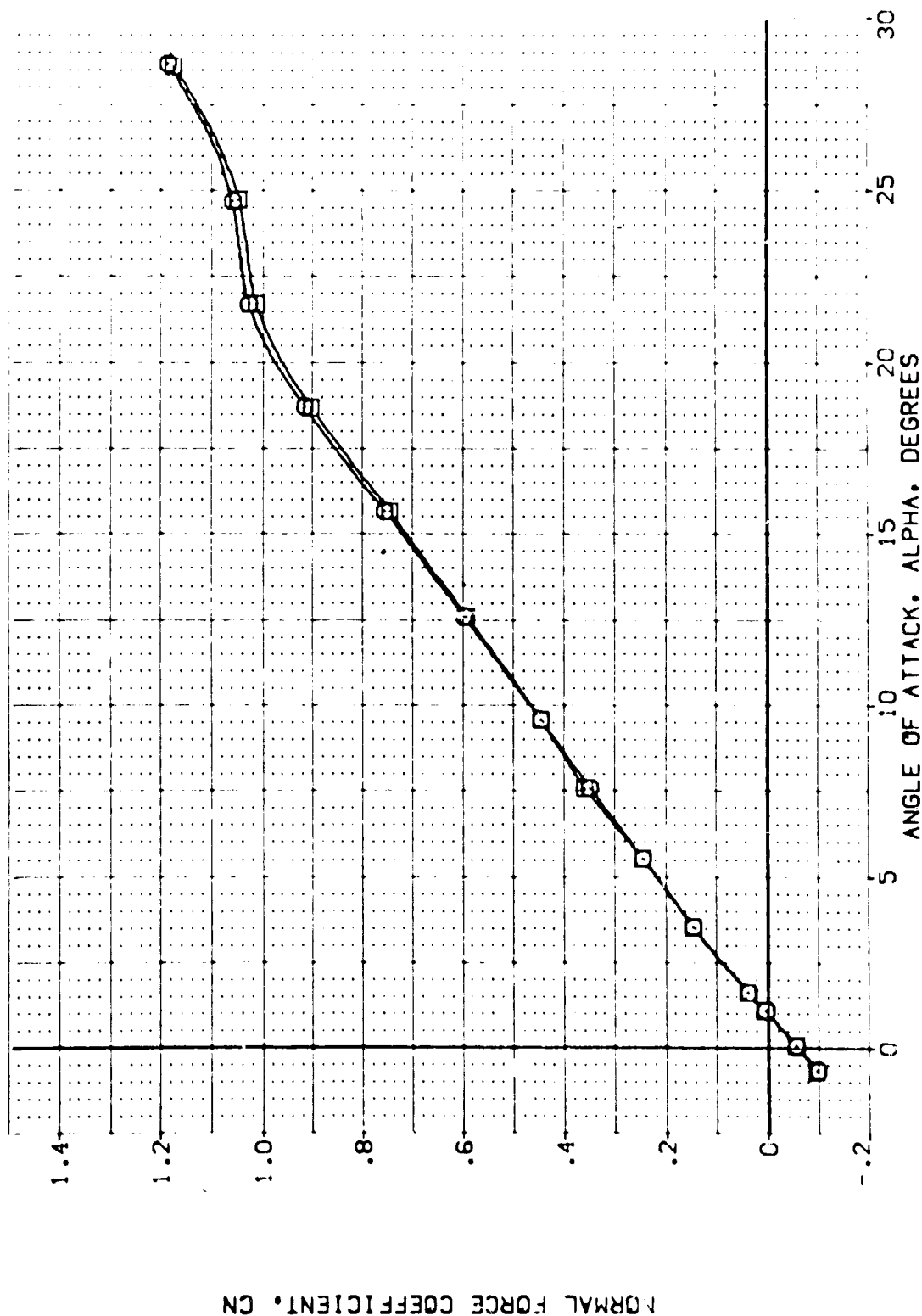


FIG. 6 WING MATRIX  
(CMACH = .90)

DATA SET SYMBOL: [TEJ028] [TEJ016] CONFIGURATION DESCRIPTION: ARC 11-747 0A53A B C H F V2 V NOT: RV/L ELEVON: .000 .000 .000 .000 AILURON: .000 .000 .000 .000 BOFLAP: .000 .000 .000 .000 SPOBRK: 25.000 25.000 25.000 25.000 REFERENCE INFORMATION: SREF: 2.4210 SQ.FT. LREF: 14.2440 N. BREF: 28.1004 N. XMRP: 32.3010 N. YMRP: .0000 N. ZMRP: 1.2500 N. SCALE: .0300

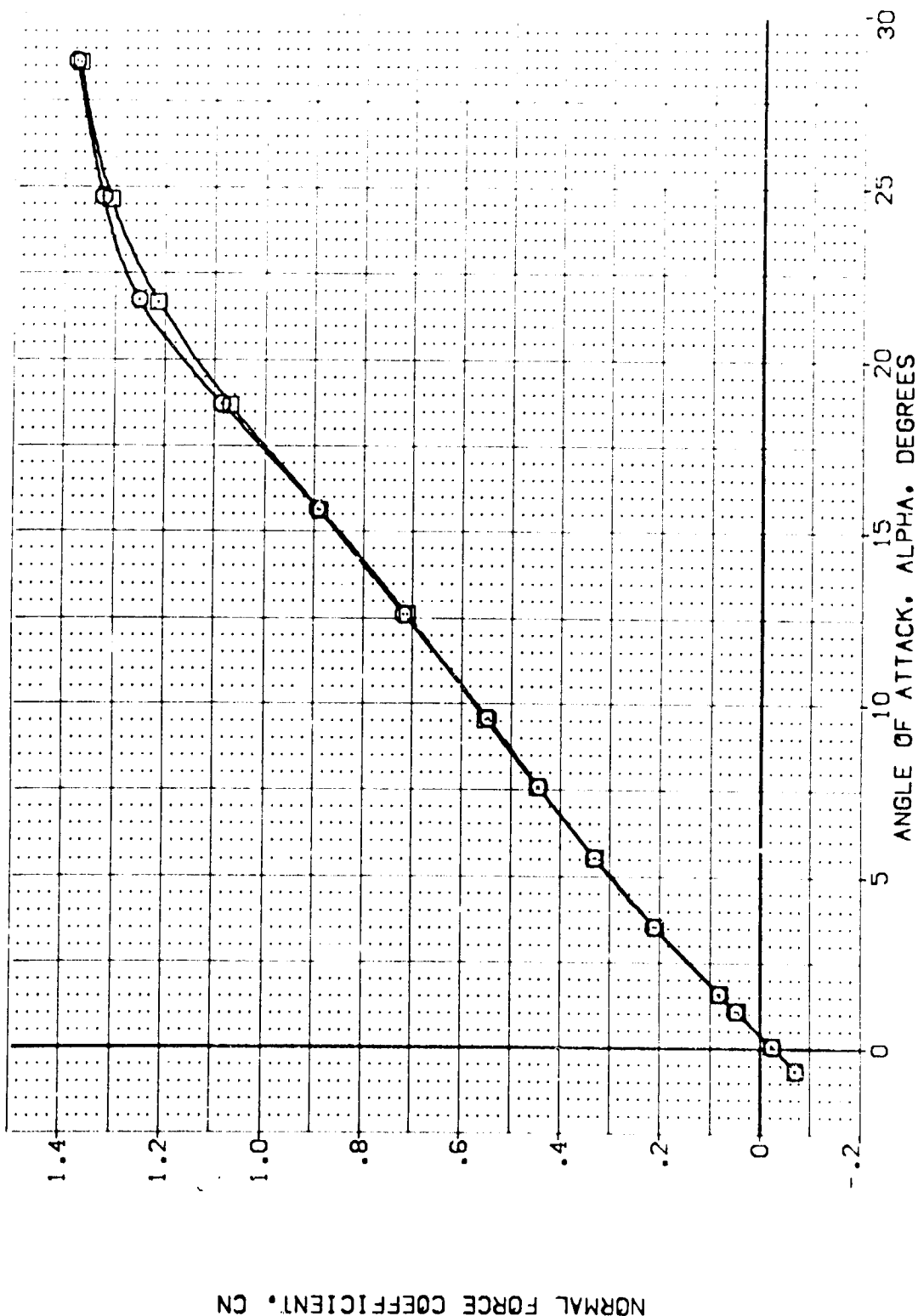


FIG. 6 WING MATRIX

(DJMACH = 1.05



DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 (TEJ028) ARC 11-747 QAS3A B C M F V2 V NOM: RV/L  
 (TEJ016) ARC 11-747 QAS3A B C M F V1 V NOM: RV/L

ELEVON AILERON BDF LAP SPOILER  
 .000 .000 .000 25.000  
 .000 .000 .000 25.000

REFERENCE INFORMATION  
 SREF 2.4210 SQ. FT.  
 LREF 14.2440  
 BREF 28.1004  
 XMRP 32.3010  
 YMRP .0000  
 ZMRP 11.2500  
 SCALE .0300

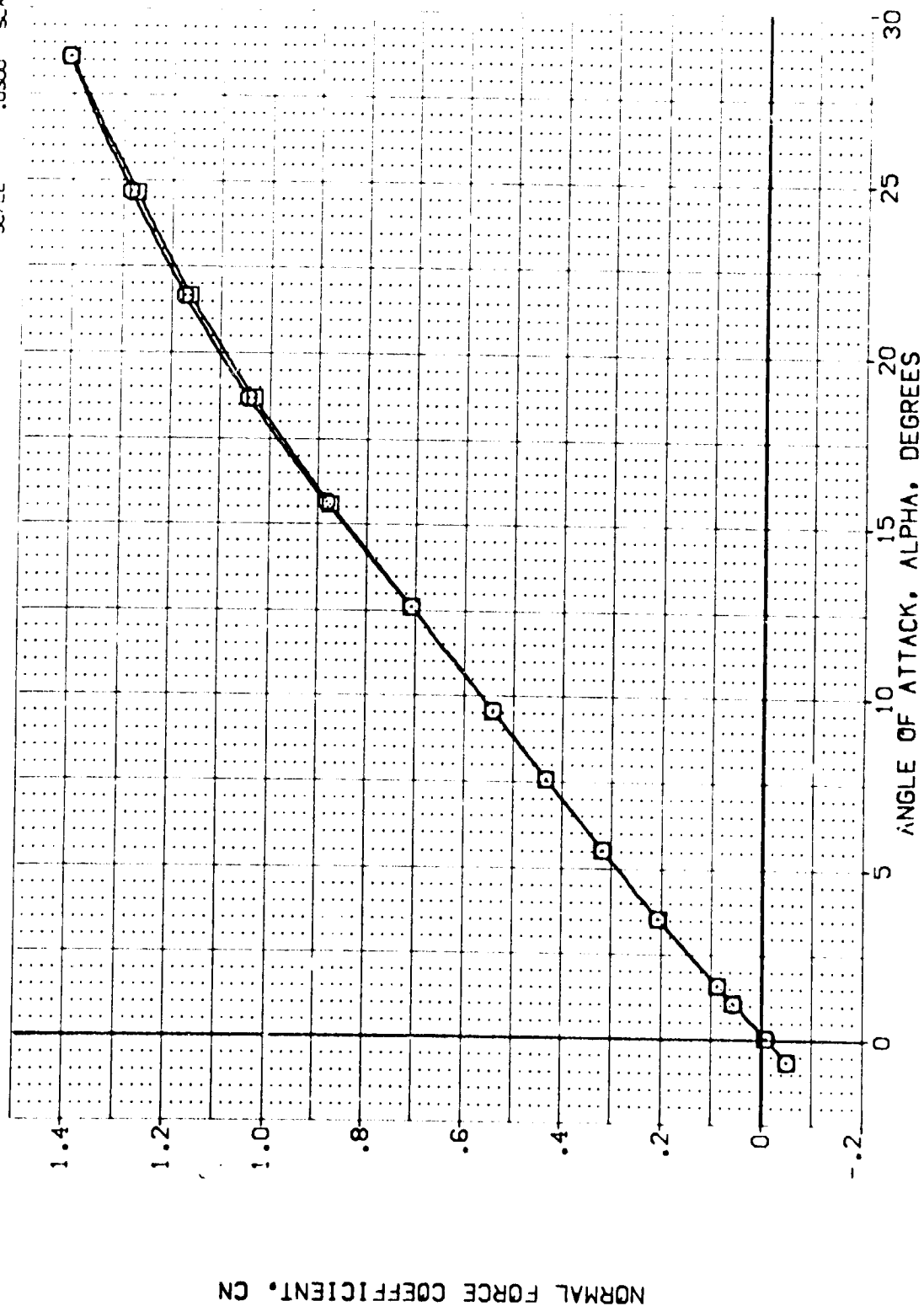


FIG. 6 WING MATRIX

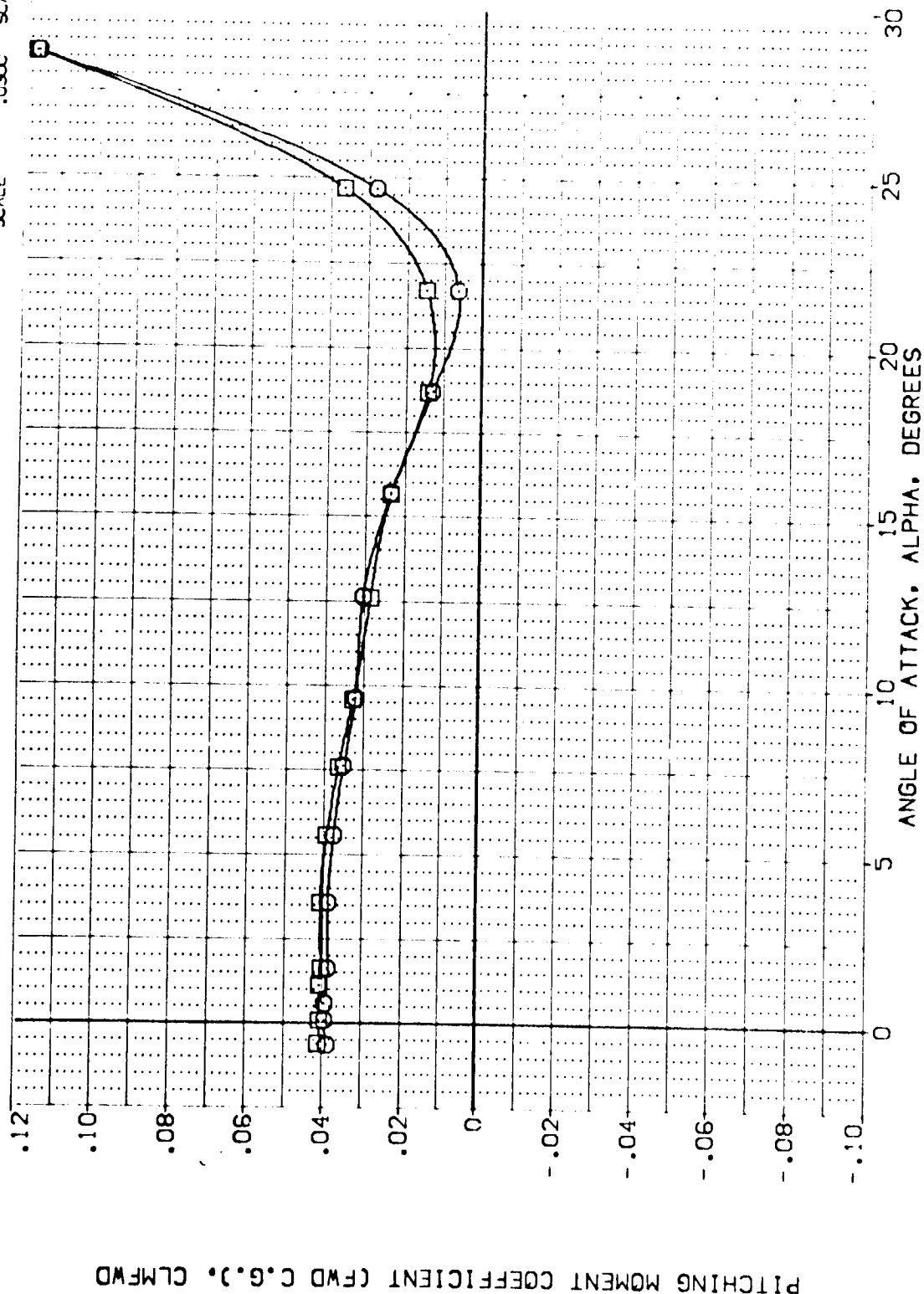
(MACH = 1.20)

DATA SET SYMBOL: (TEJ028) (TEJ016)

CONFIGURATION DESCRIPTION: ARC 11-747 OAS3A B C H F V2 V NOM. RV/L  
ARC 11-747 OAS3A B C H F V1 V NOM. RV/L

ELEVON: .000 .000 .000  
AILRON: .000 .000 .000  
BOLAP: .000 .000 .000  
SPDRBK: 25.000 25.000 25.000

REFERENCE INFORMATION:  
SPREF: 2.4210 SQ.FT.  
LREF: 14.2440 IN.  
BREF: 28.1004 IN.  
XMRP: 32.3010 IN.  
YMRP: .0000 IN.  
ZMRP: 11.2500 IN.  
SCALE: .0300



PITCHING MOMENT COEFFICIENT (Cm), CLMFW

FIG. 6 WING MATRIX

(MACH = .60)

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPOBRK	REFERENCE INFORMATION
(TEJ028)	ARC 11-747 DAS3A B C H F V2 V	.000	.000	.000	25.000	SREF 2.4210 SQ.FT.
(TEJ016)	ARC 11-747 DAS3A B C H F V1 V	.000	.000	.000	25.000	LREF 14.2440
						BREF 28.1004
						XMRP 32.3010
						YMRP .0000
						ZMRP 11.2500
						SCALE .0300

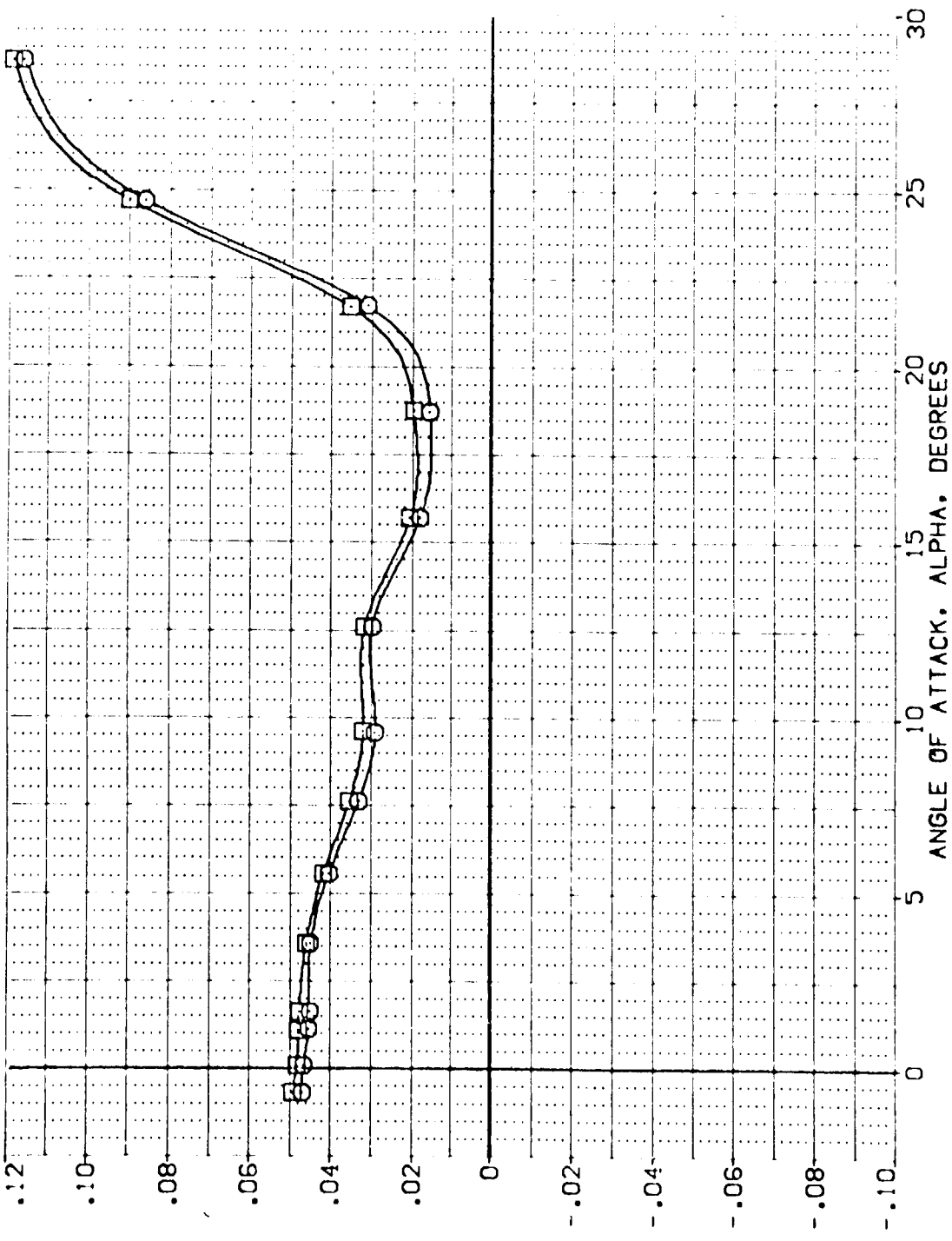



FIG. 6 WING MATRIX

(B)MACH = .80





DATA SET SYMBOL		CONFIGURATION DESCRIPTION										ELEVON		AILERON		BOFLAP		SPOILER		REFERENCE INFORMATION	
[TEJ028] [TEJ016]		ARC 11-747		0A53A		B	C	M	F	V2	V	NON	RV/L	NON	RV/L	SREF	2.4210	50. FT.			
		ARC 11-747		0A53A		B	C	M	F	V1	V	NON	RV/L	NON	RV/L	LREF	14.2440	IN.			
																BREF	28.1004	IN.			
																YMRP	32.3010	IN.			
																ZMRP	.0000	IN.			
																SCALE	11.2500	IN.			
																	.0300	SCALE			

PITCHING MOMENT COEFFICIENT (FWD C.G.), CLMFW

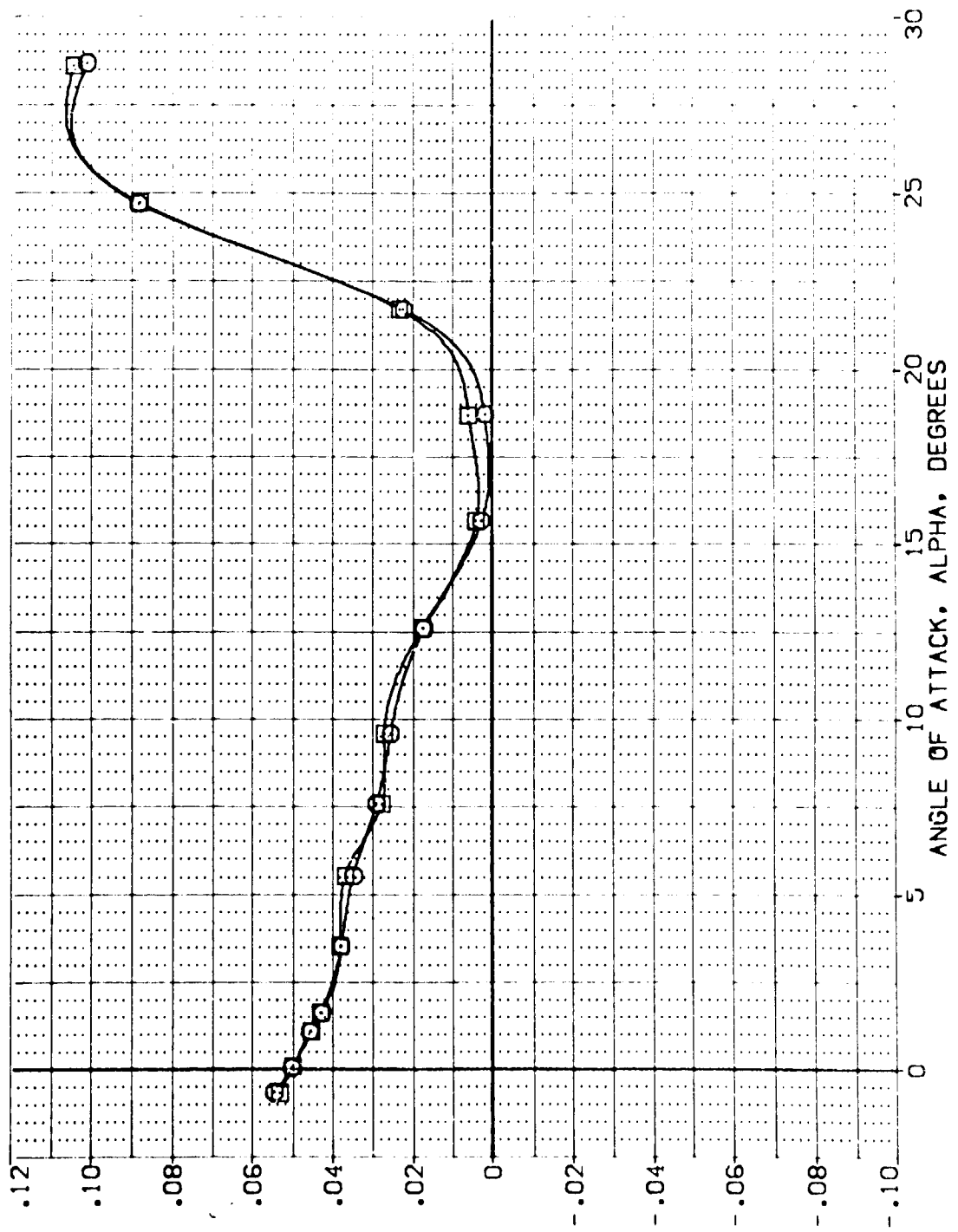


FIG. 6 WING MATRIX

(C)MACH = .90

REFERENCE INFORMATION		SO. FT.
SREF	2.4210	IN.
LREF	14.2440	IN.
BREF	28.1004	IN.
XMRP	32.3010	IN.
YMRP	0.0000	IN.
ZMRP	11.2500	IN.
SCALE	0.0000	SCALE

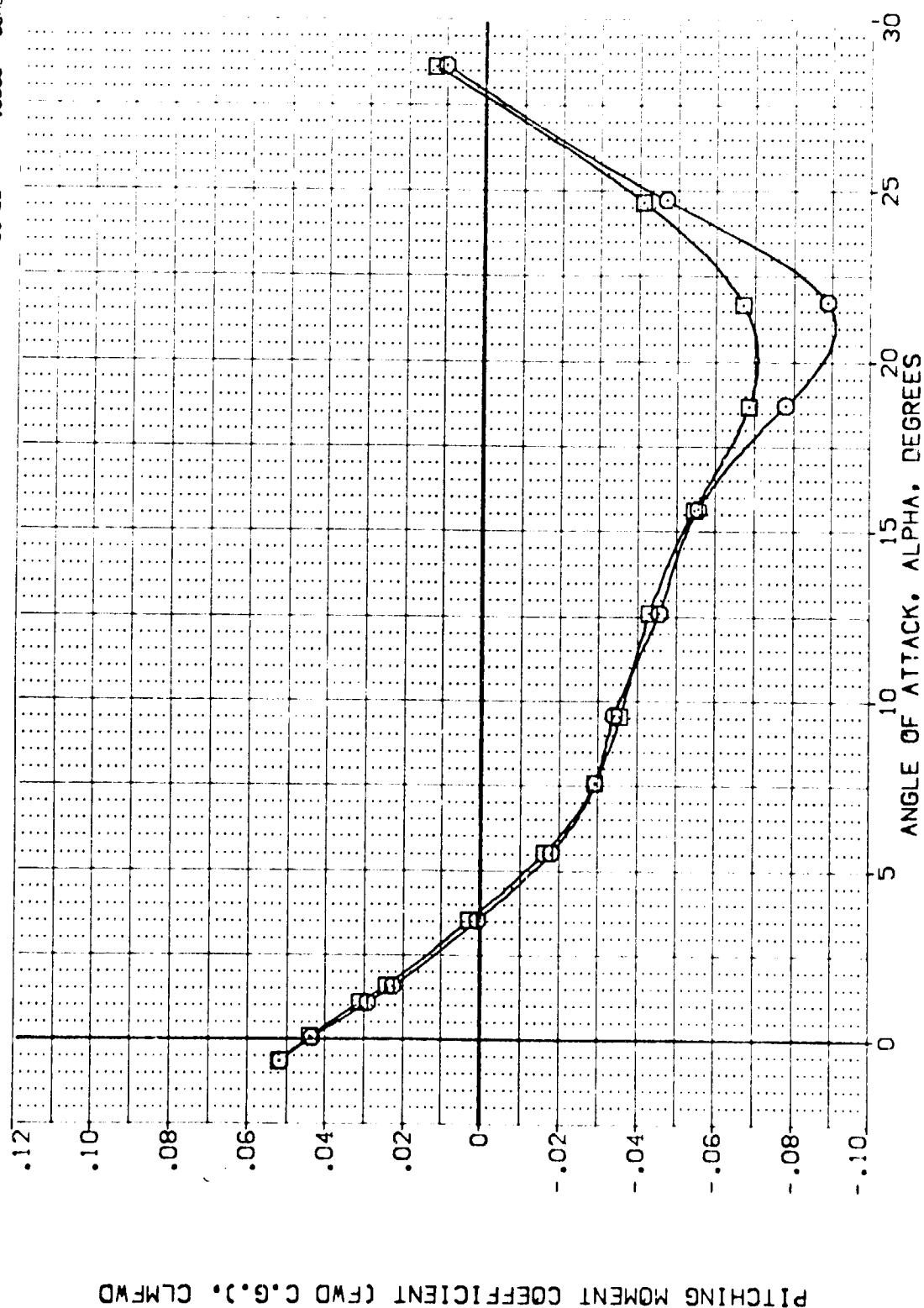


FIG. 6 WING MATRIX

```
COMACH = 1.05
```



DATA SET SYMBOL: [TEJ028] [TEJ016]

CONFIGURATION DESCRIPTION: ARC 11-747 B A53A B C M F V2 V NOM: RVUL  
 ARC 11-747 B A53A B C M F V1 V NOM: RVUL

ELEVON: .000 .000 .000

AILERON: .000 .000 .000

BOFLAP: .000 .000 .000

SPOBRK: 25.000 25.000 25.000

REFERENCE INFORMATION: SREF: 2.4210 SQ.FT.  
 LREF: 14.2440 IN.  
 BREF: 28.1004 IN.  
 XMRP: 32.3010 IN.  
 YMRP: .0000 IN.  
 ZMRP: 11.2500 IN.  
 SCALE: .0300

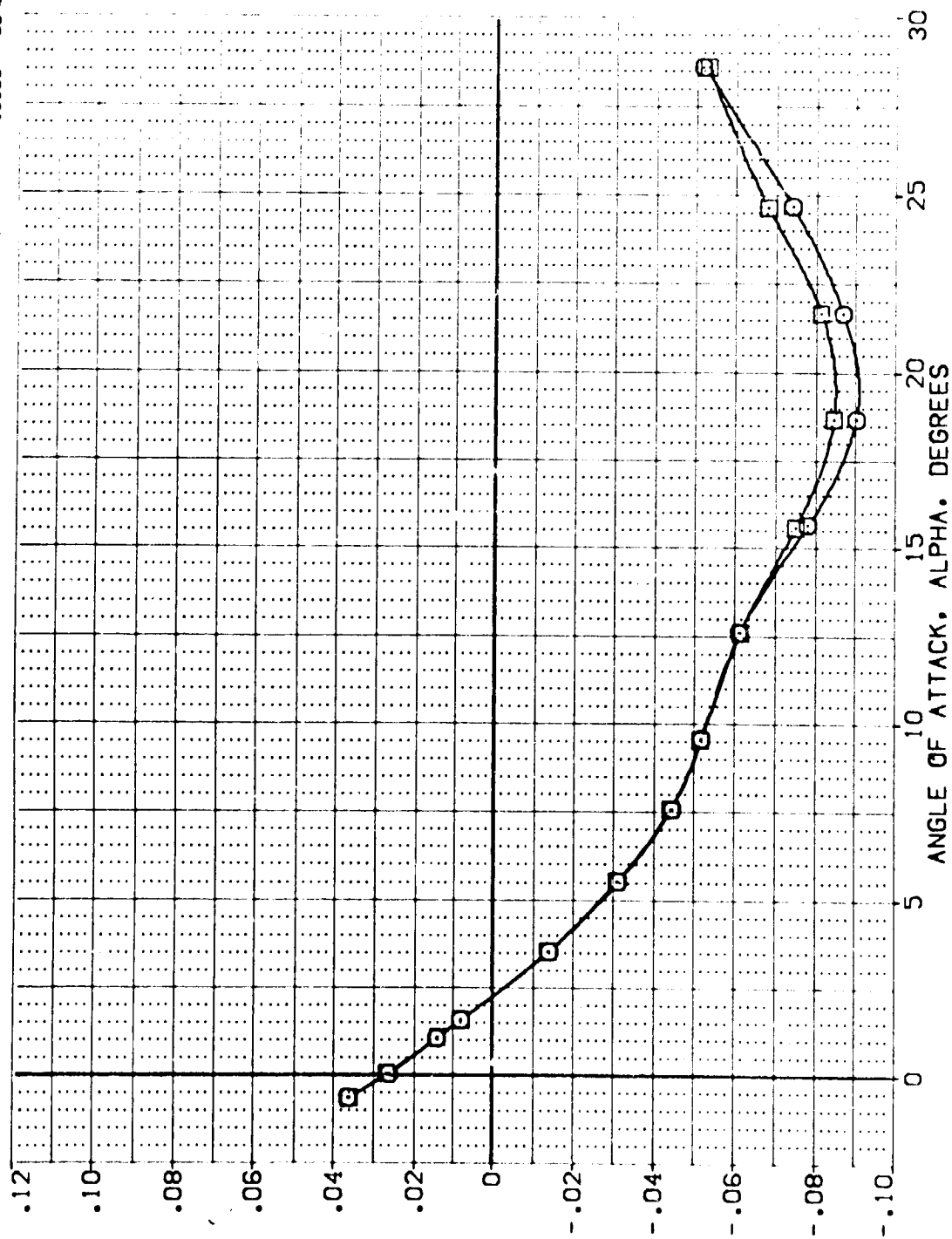


FIG. 6 WING MATRIX

(MACH = 1.20)



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AIRLON	BD FLAP	SPDBRK	REFERENCE INFORMATION
{TEJ028}	ARC 11-747 DAS3A B C M F V2 V	.000	.000	.000	25.000	SREF 2.4210 SQ.FT.
{TEJ016}	ARC 11-747 DAS3A B C M F V1 V	.000	.000	.000	25.000	LREF 14.2440 IN.
						BREF 28.1004 IN.
						XMRP 32.3010 IN.
						VMRO .0000 IN.
						ZMRP .0000 IN.
						SCALE 11.2500
						SCALE .0300

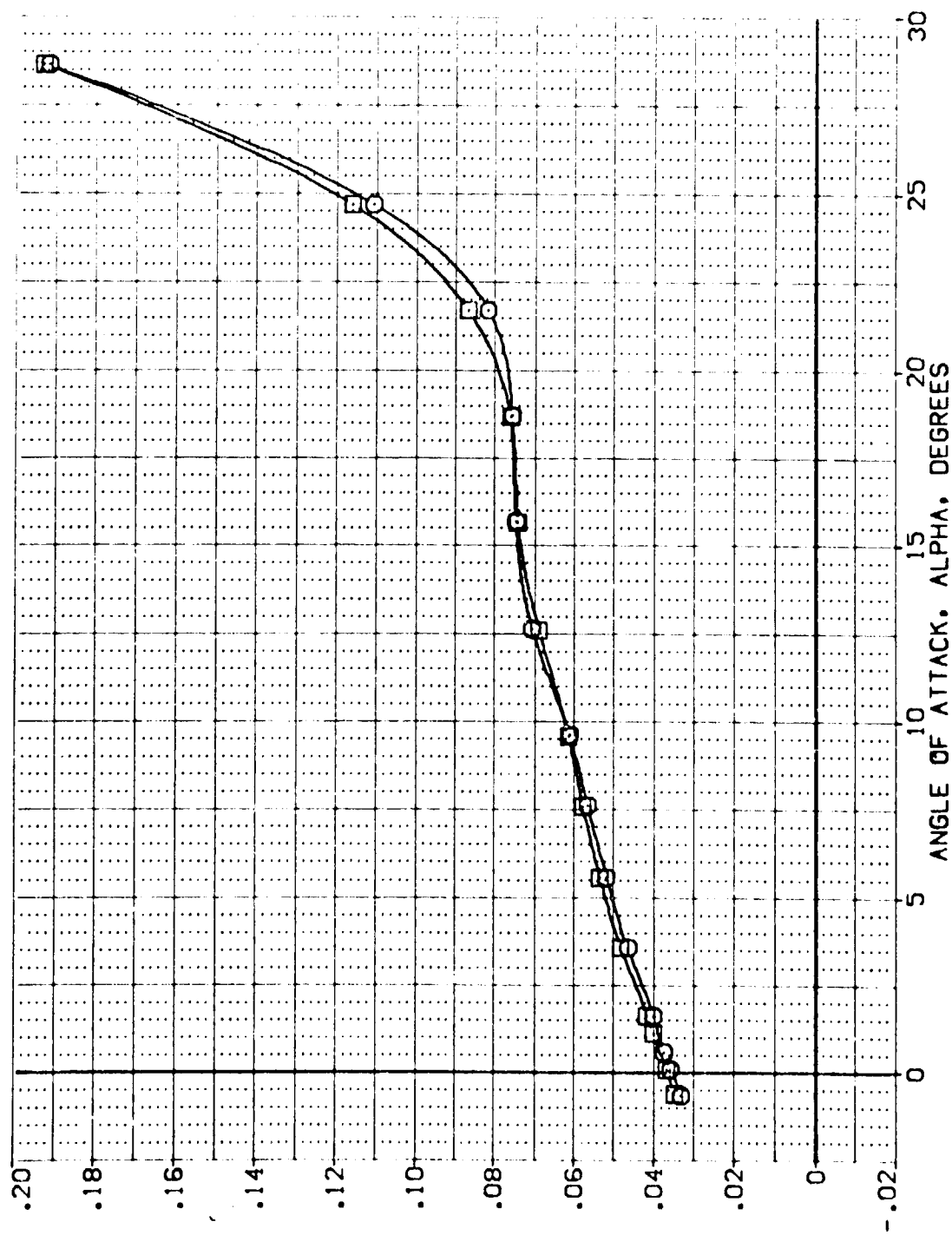


FIG. 6 WING MATRIX

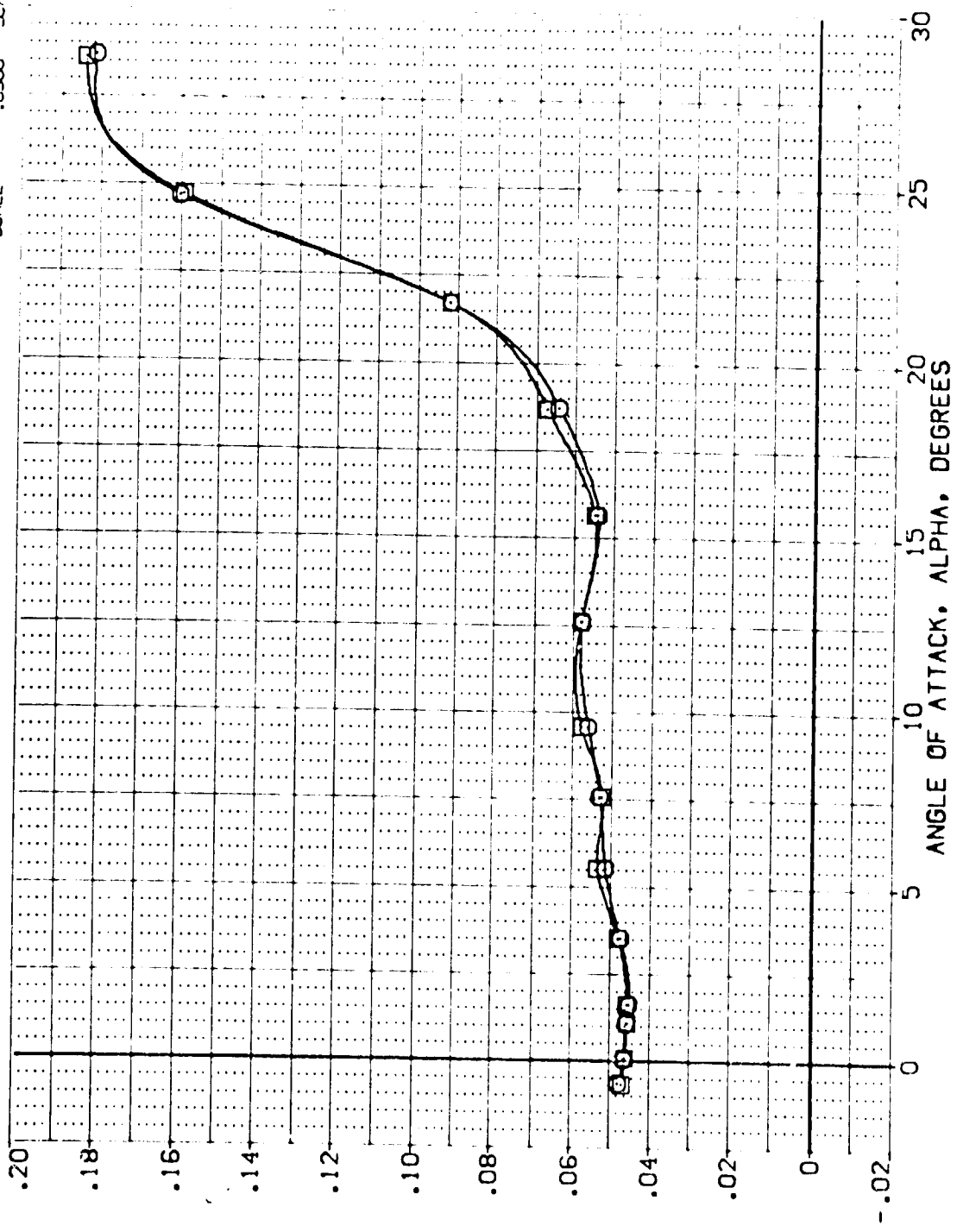
(A)MACH = .60



DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 (TEJ028) ARC 11-747 DA53A B C M F V2 V NOM. RV/L  
 (TEJ016) ARC 11-747 DA53A B C M F V1 V NOM. RV/L

ELEVON AILERON BDF LAP SPODBRK  
 .000 .000 .000 25.000  
 .000 .000 .000 25.000

REFERENCE INFORMATION  
 SPREF 2.4210 SQ.FT.  
 LREF 14.2440 IN.  
 BREF 28.1004 IN.  
 XMRP 32.3010 IN.  
 YMRP .0000 IN.  
 ZMRP 11.2500 IN.  
 SCALE .0300



PITCHING MOMENT COEFFICIENT (CFT C.G.), CLMAFT

FIG. 6 WING MATRIX

(C)MACH = .90



DATA SET SYMBOL: (TEJ028) (TEJ016)  CONFIGURATION DESCRIPTION: ARC 11-747 0A53A B C M F V2 V NOM; RVUL ARC 11-747 0A53A B C M F V1 V NOM; RVUL

EL: ON	AIL: ON	BD: LAP	SP: DBRK
.000	.000	.000	25.000
.000	.000	.000	25.000

REFERENCE INFORMATION:

SREF	2.4210	SD: FT.
LREF <td>14.2440<td>IN.</td></td>	14.2440 <td>IN.</td>	IN.
BREF <td>28.1004<td>IN.</td></td>	28.1004 <td>IN.</td>	IN.
XMRP <td>32.3010<td>IN.</td></td>	32.3010 <td>IN.</td>	IN.
YMRP <td>.0000<td>IN.</td></td>	.0000 <td>IN.</td>	IN.
ZMRP <td>11.2500<td>IN.</td></td>	11.2500 <td>IN.</td>	IN.
SCALE <td>.0300<td>SCALE</td></td>	.0300 <td>SCALE</td>	SCALE

PITCHING MOMENT COEFFICIENT (CAFT C.G.), CLMAFT

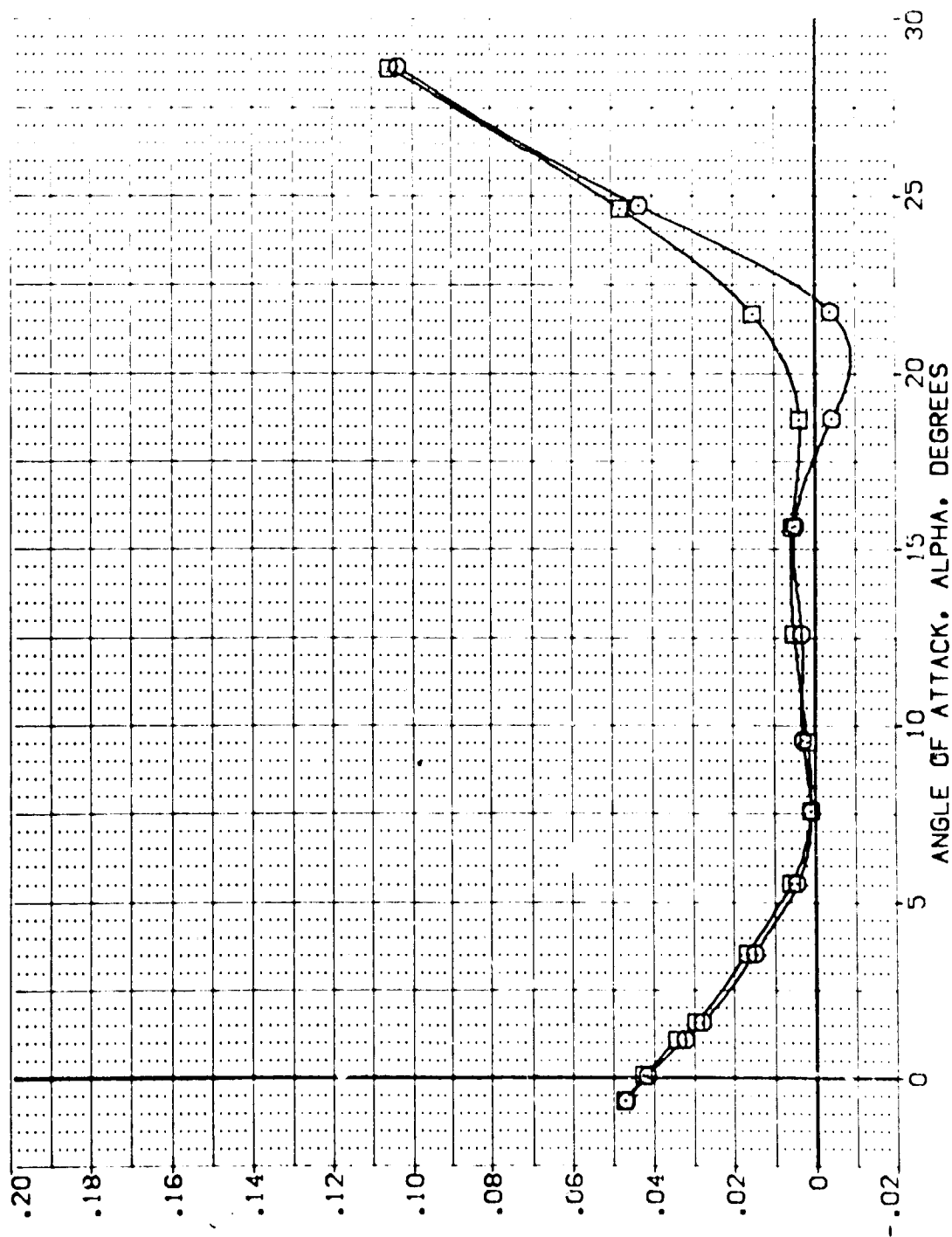


FIG. 6 WING MATRIX  
(O)MACH = 1.05

DATA SET SYMBOL: (TEJ028) (TEJ016)

CONFIGURATION DESCRIPTION: ARC 11-747 BASSA B C M F V2 V NOM. RV/L ARC 11-747 BASSA B C M F V1 V NOM. RV/L

ELEVON: .000 .000

AILERON: .000 .000

BOFLAP: .000 .000

SPOBRK: 25.000 25.000

REFERENCE INFORMATION:

SREF	2.4210	50. FT.
LREF	14.2440	IN.
BREF	28.1004	IN.
XMRP	32.3010	IN.
YMRP	.0000	IN.
ZMRP	11.2500	IN.
SCALE	.0300	SCALE

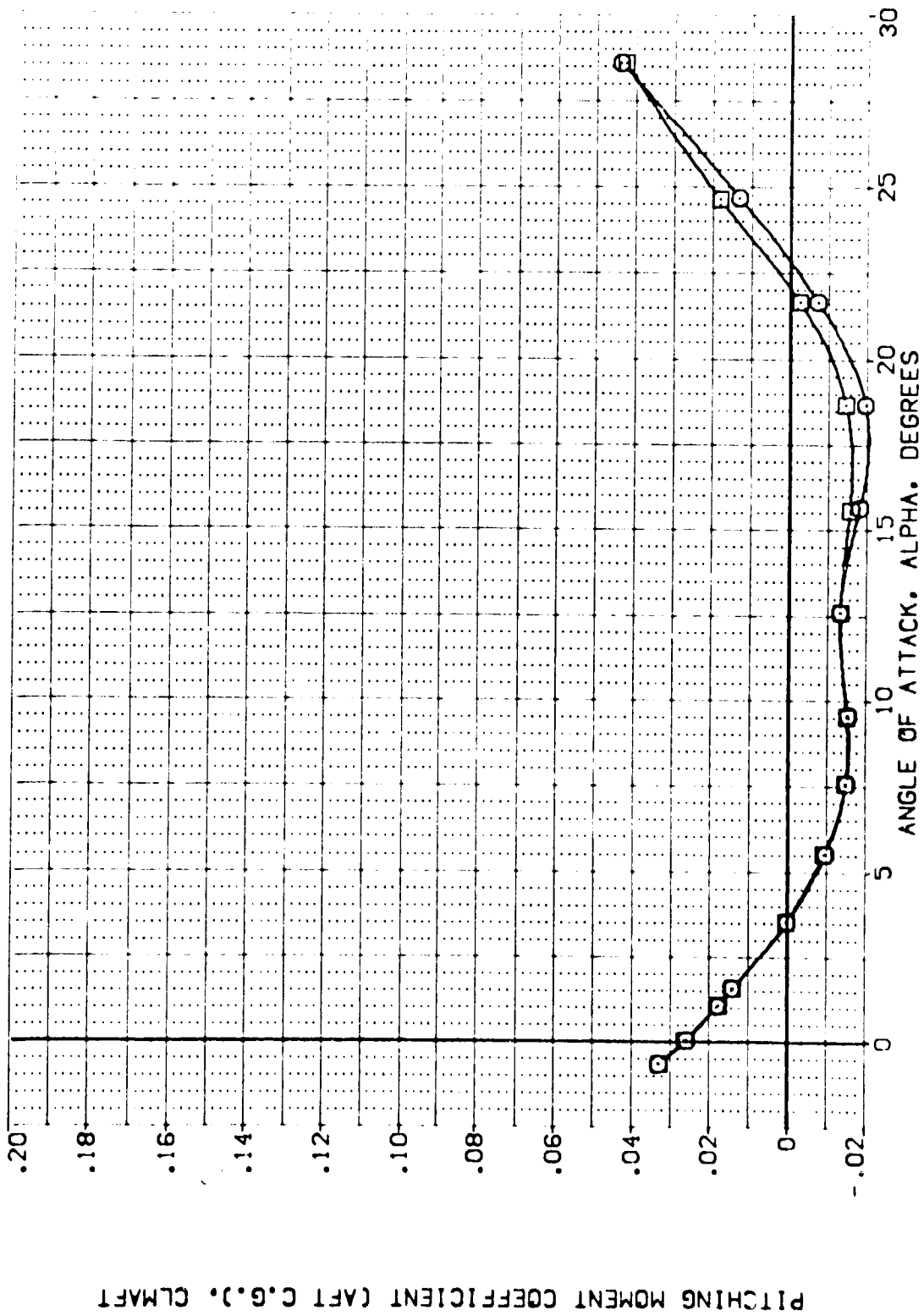


FIG. 6 WING MATRIX

(C)MACH = 1.20



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPDBRK	REFERENCE INFORMATION
(TEJ028)	ARC 11-747 DASSA B C M F V2 V	.000	.000	.000	25.000	SREF 2.4210 50. FT.
(TEJ016)	ARC 11-747 DASSA B C M F V1 V	.000	.000	.000	25.000	LREF 14.2440 IN.
						BREF 28.1004 IN.
						XREF 32.3013 IN.
						YREF .0000 IN.
						ZREF 11.2500 IN.
						SCALE .0300

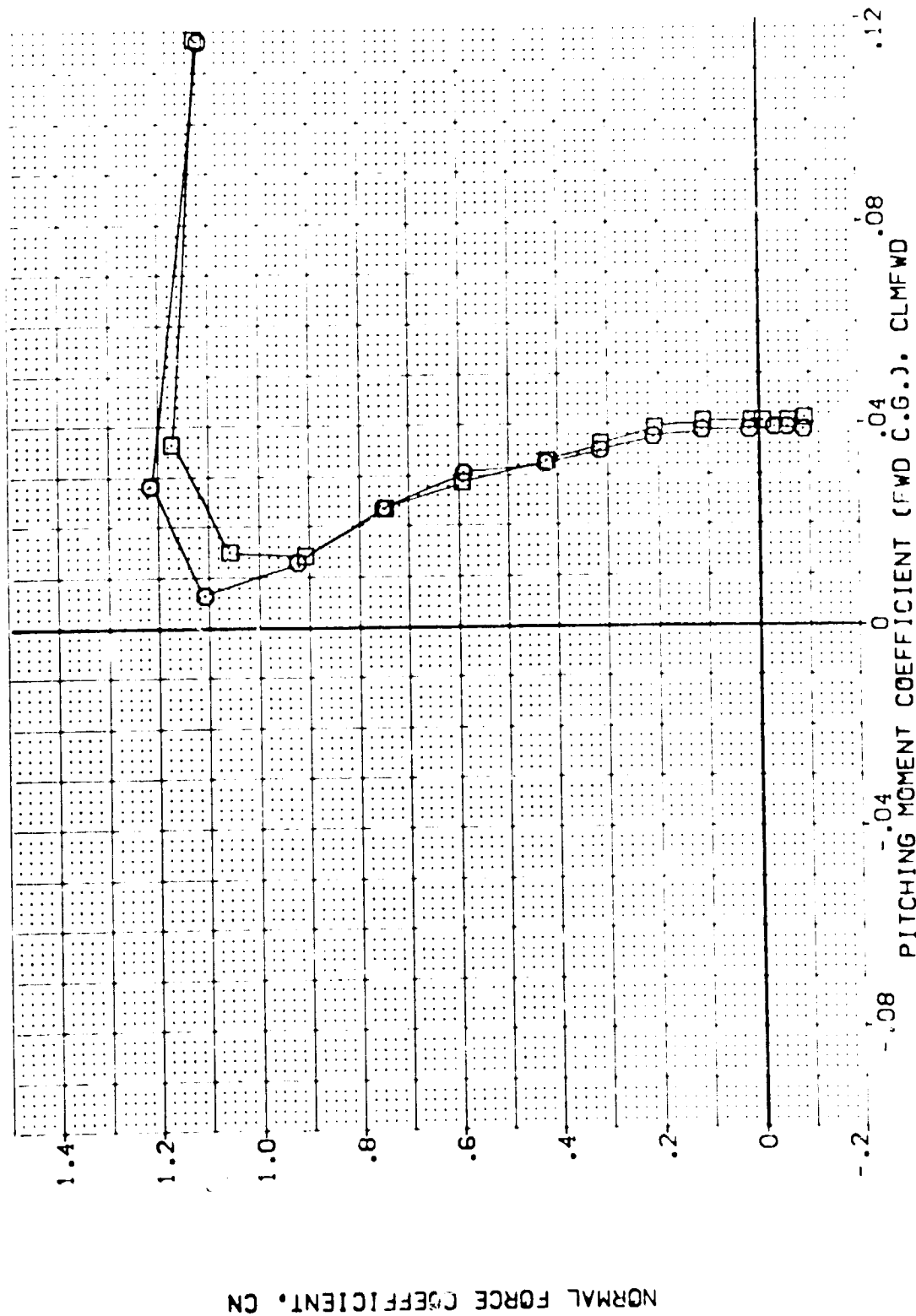


FIG. 6 WING MATRIX

(A) MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPOILER	REFERENCE INFORMATION
(TEJ008)	ARC 11-747 QAS3A B C H F V2 V	.000	.000	.000	75.000	SREF 2.4210 SQ.FT.
(TEJ016)	ARC 11-747 QAS3A B C H F V1 V	.000	.000	.000	25.000	LREF 14.2440 N.
						BREF 28.1004 N.
						XMRP 32.3010 N.
						YMRP .0000 N.
						ZMRP 11.2500 N.
						SCALE .0370 SCALE

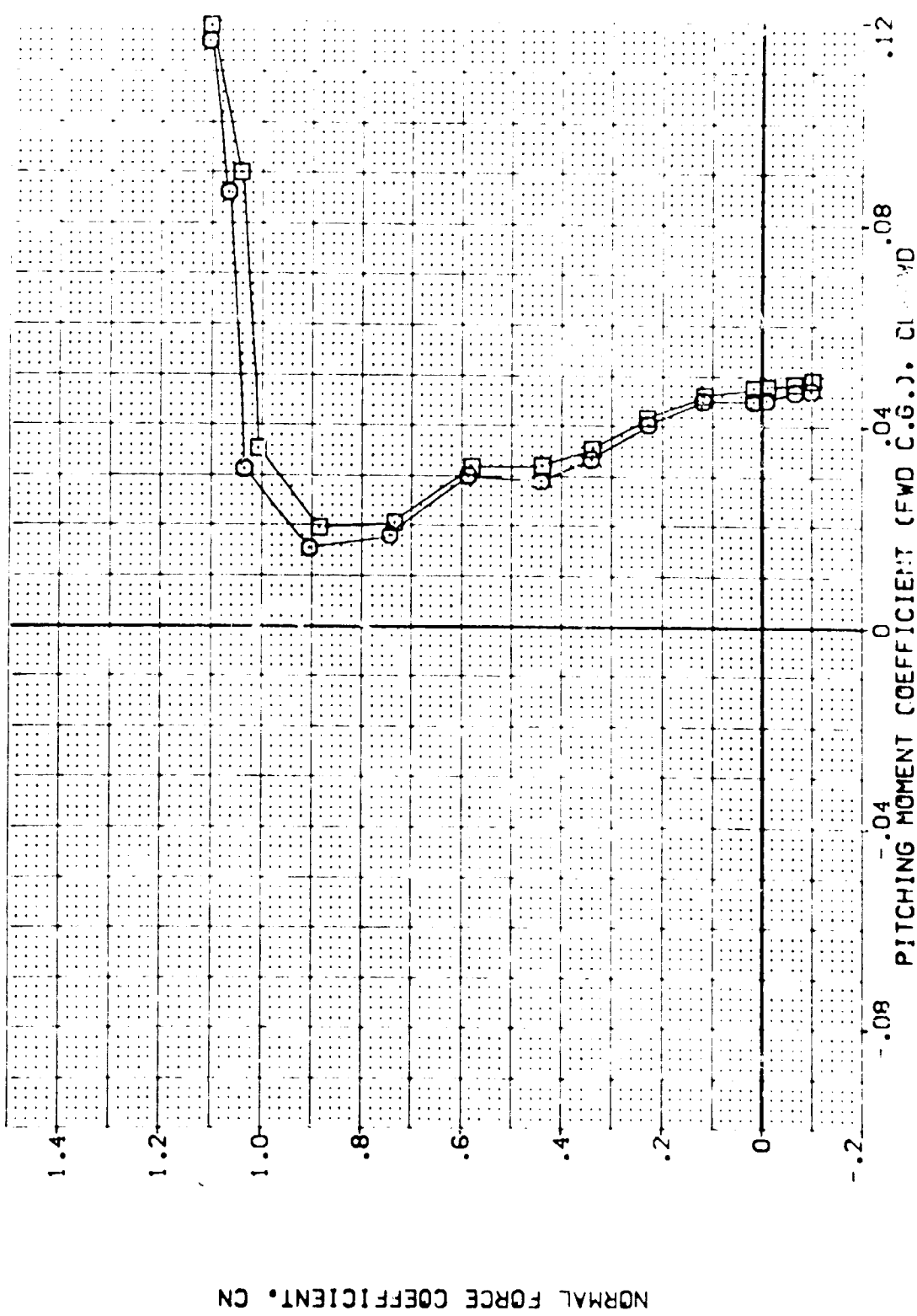


FIG. 6 WING MATRIX

(B) MACH = .80

DATA SET SYMBOL: (TEJ028) (12J016)

CONFIGURATION DESCRIPTION: ARC 11-747 DAS3A B C M F V2 V NMH: RN/L NMH: RN/L

ELEVON: .000 .000 .000

AILERON: .000 .000 .000

BOFLAP: .000 .000 .000

SPDWRK: 25.000 25.000 25.000

REFERENCE INFORMATION:

	SREF	2.4210	SO.FT.
LREF	14.2440	IN.	
BREF	28.1004	IN.	
XMRP	32.3010	IN.	
YMRP	.0000	IN.	
ZMRP	11.2500	IN.	
SCALE	.0300	SCALE	

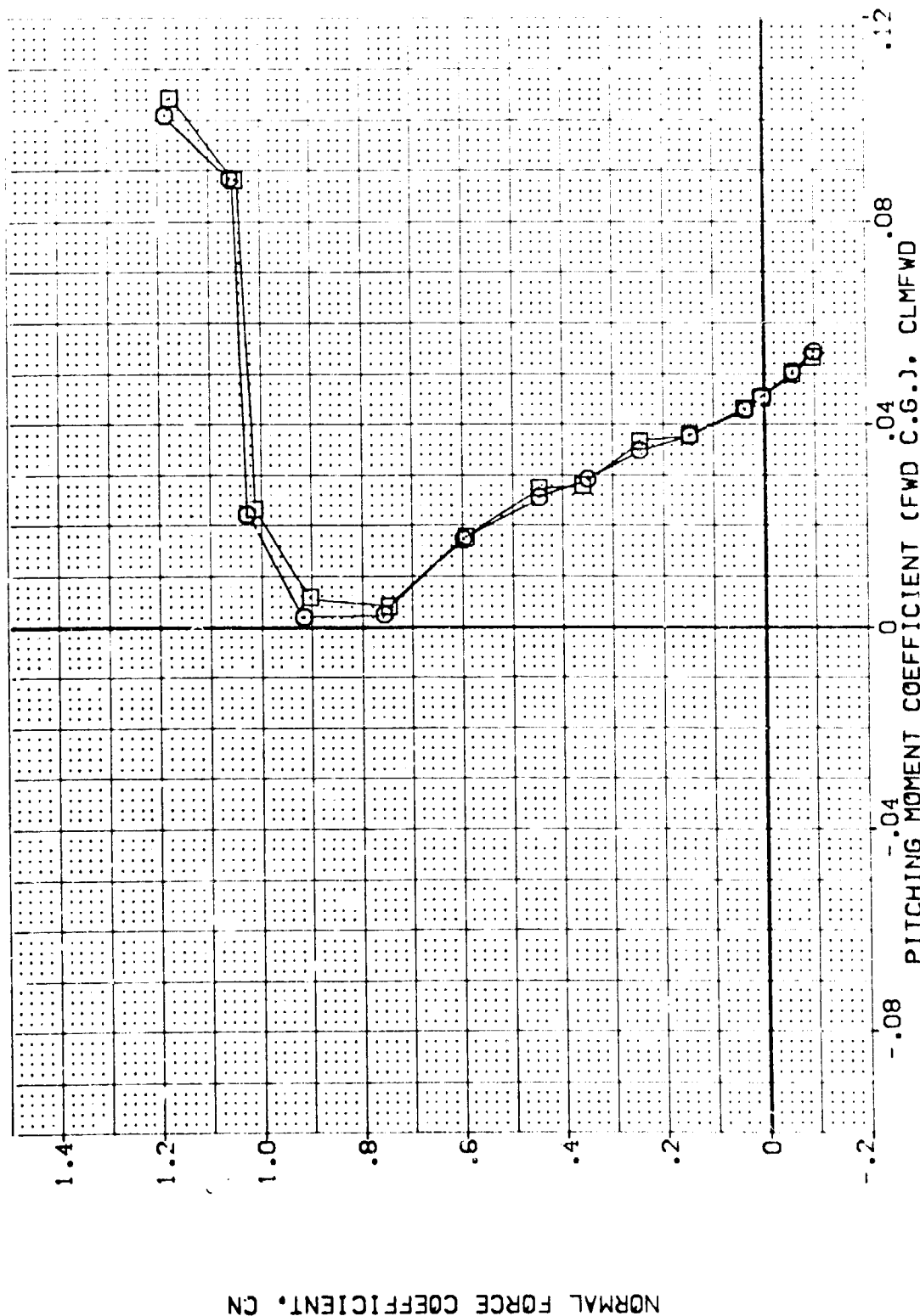


FIG. 6 WING MATRIX

(C)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAF	SPDBRK	REFERENCE INFORMATION
(TEJ028)	ARC 11-747 QAS3A B C H F V2 V	.000	.000	.000	25.000	SREF 2.4210 SQ.FT.
(TEJ015)	ARC 11-747 QAS3A B C H F V1 V	.000	.000	.000	25.000	LREF 14.2440 IN.
						BREF 28.1004 IN.
						AMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

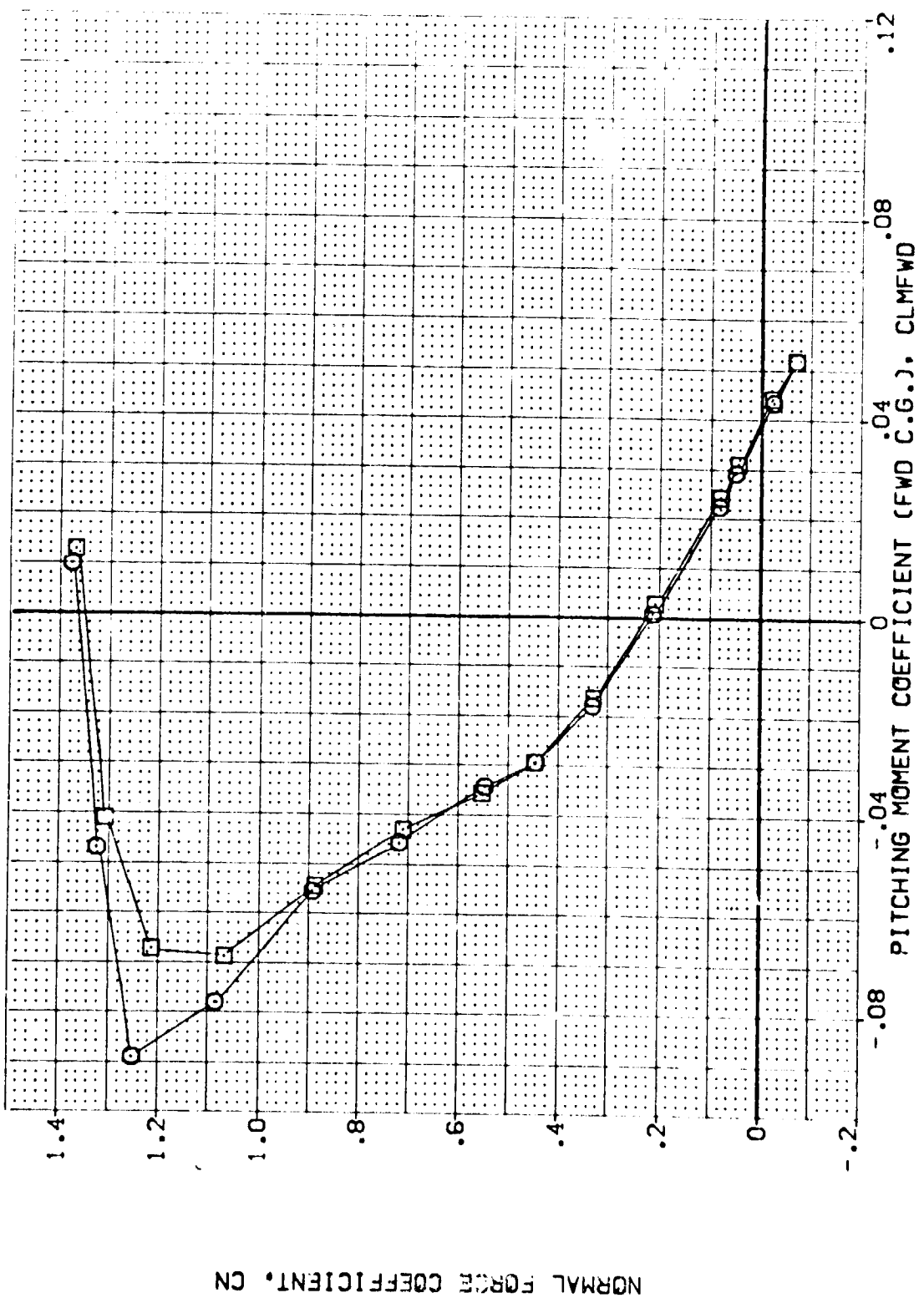


FIG. 6 WING MATRIX

(C)MACH = 1.05



DATA SET SYMBOL: [TEJ028] [TEJ016]  
CONFIGURATION DESCRIPTION: ARC 11-747 BAS3A B C M F V2 V NOM. RN/L  
ARC 11-747 BAS3A B C M F V1 V NOM. RN/L

SPDRK	BDFLAP	AILRON	ELEVON	SPDRK	REFERENCE INFORMATION
25.000	.000	.000	.000	25.000	SREF 2.4210 SQ.FT.
25.000	.000	.000	.000	25.000	LREF 14.2440 IN.
					BREF 28.1004 IN.
					XMRP 32.3010 IN.
					YMRP .0000 IN.
					ZMRP 11.2500 IN.
					SCALE .0300

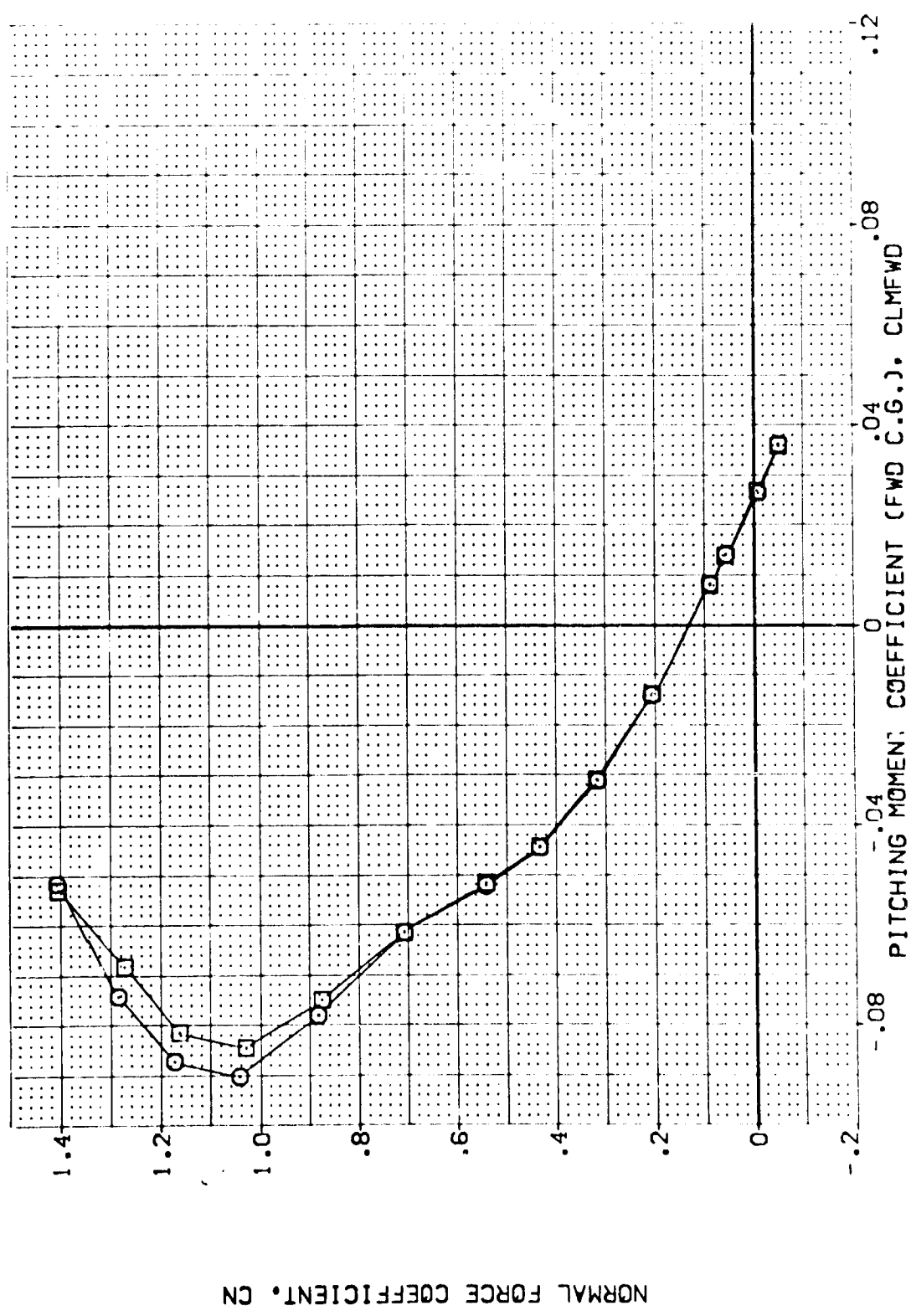


FIG. 6 WING MATRIX

(C)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPOBRK	REFERENCE INFORMATION
{TEJ028}	ARC 11-747 DA53A B C H F V2 V	.000	.000	.000	25.000	SREF 2.4210 SQ.FT.
{TEJ016}	ARC 11-747 DA53A B C H F V1 V	.000	.000	.000	25.000	LREF 14.7440 IN.
						BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP 11.0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

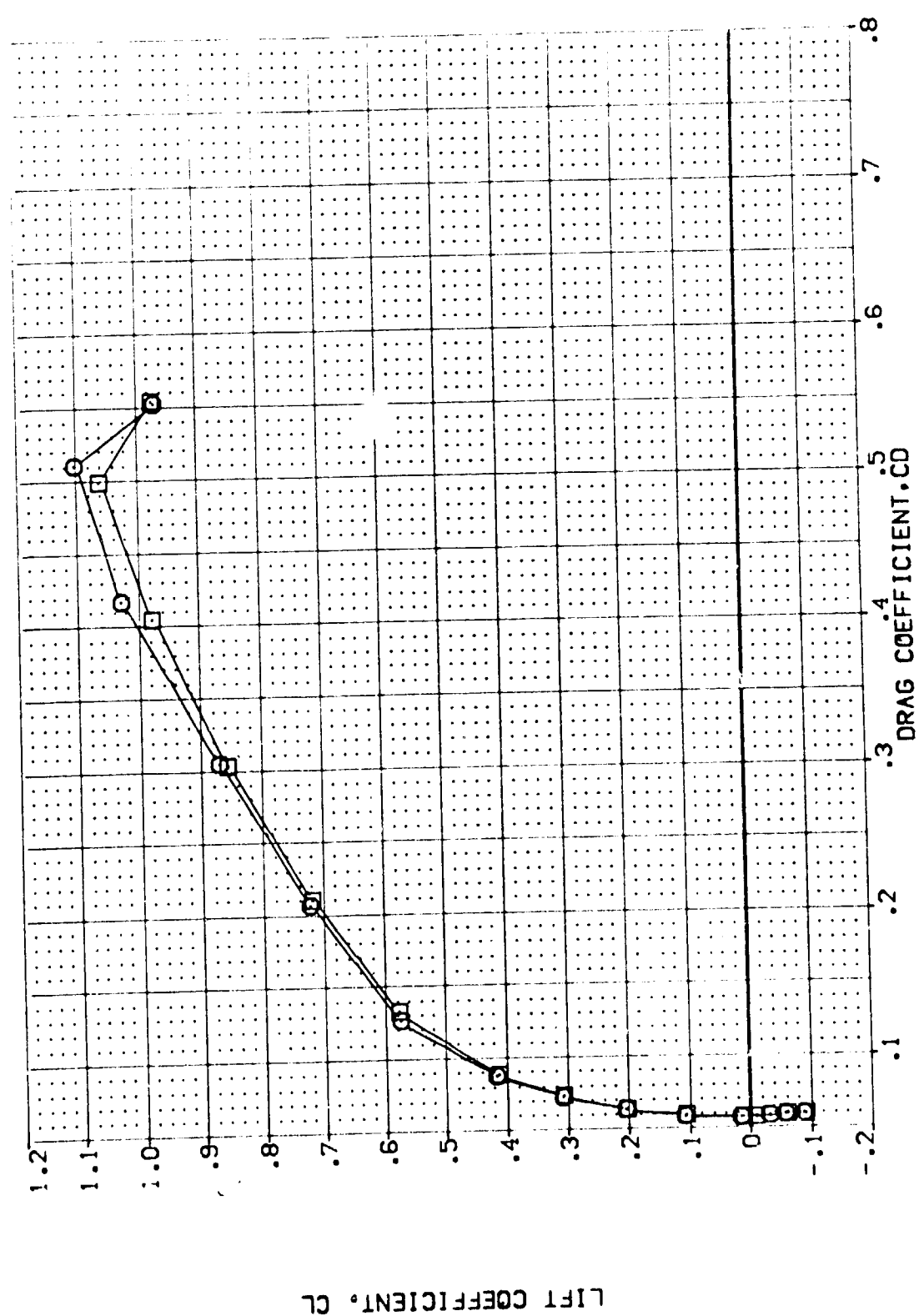


FIG. 6 WING MATRIX  
(A)MACH = .60



DATA SET SYMBOL: [ ] CONFIGURATION DESCRIPTION: ARC 11-747 QAS3A B C H F V2 V NOM, RV/L  
[ ] ARC 11-747 QAS3A B C H F V1 V NOM, RV/L

ELEVON: .000 AILRON: .000 BDFLAP: .000 SPOBRK: 25.000

REFERENCE INFORMATION: SREF: 2.4210 SQ.FT.  
LREF: 14.2440 IN.  
BREF: 28.1004 IN.  
XMRP: 32.3010 IN.  
YMRP: 11.2500 IN.  
ZMRP: .0300 IN.  
SCALE: .0300

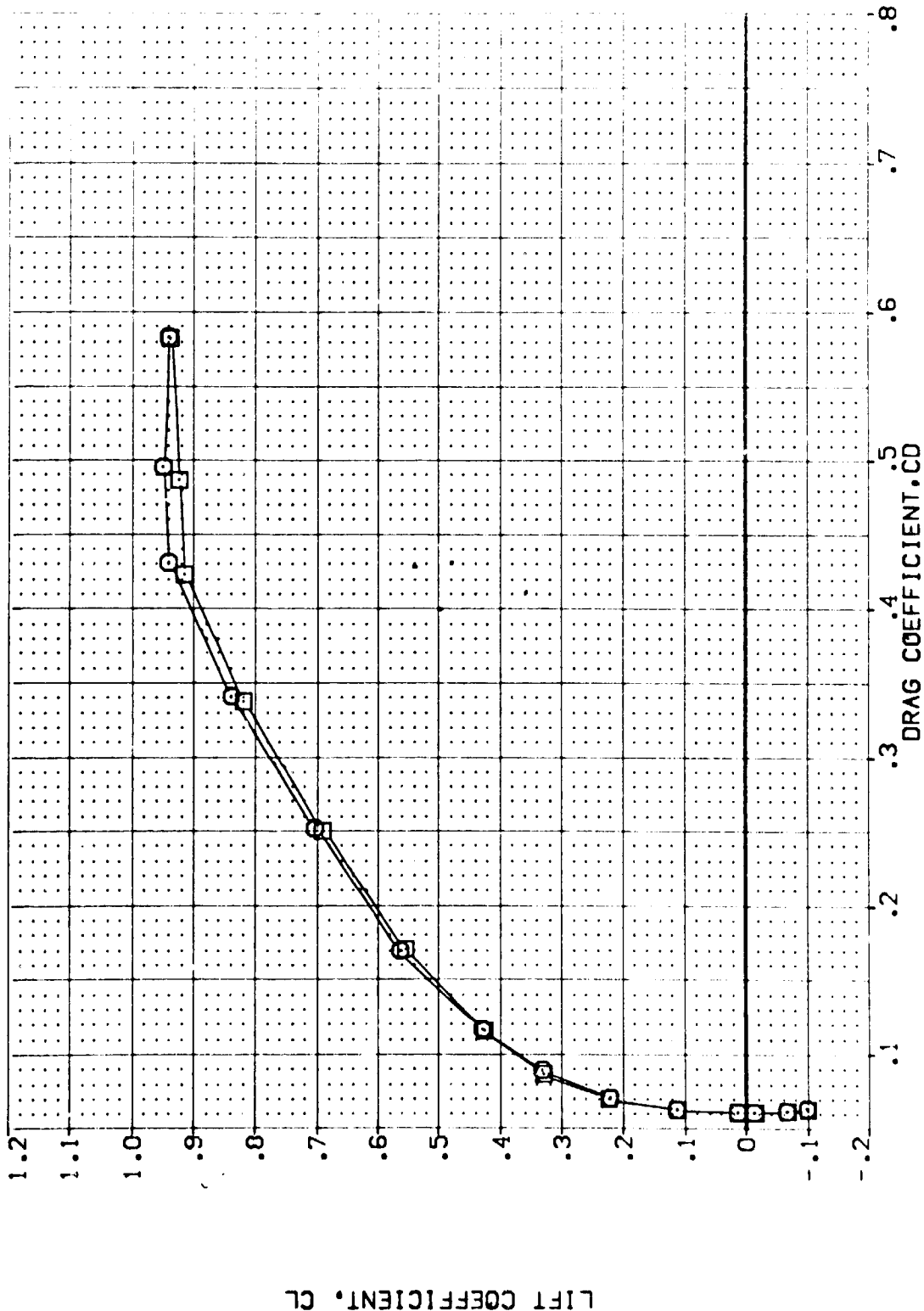


FIG. 6 WING MATRIX

(B)MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BD FLAP	SPDBRK	REFERENCE INFORMATION
(TEJ028)	ARC 11-747 BA53A B C M F V2 V	.000	.000	.000	25.000	SREF 2.4210 SQ.FT.
(TEJ016)	ARC 11-747 BA53A B C M F V1 V	.000	.000	.000	25.000	LREF 14.2440 IN.
						BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

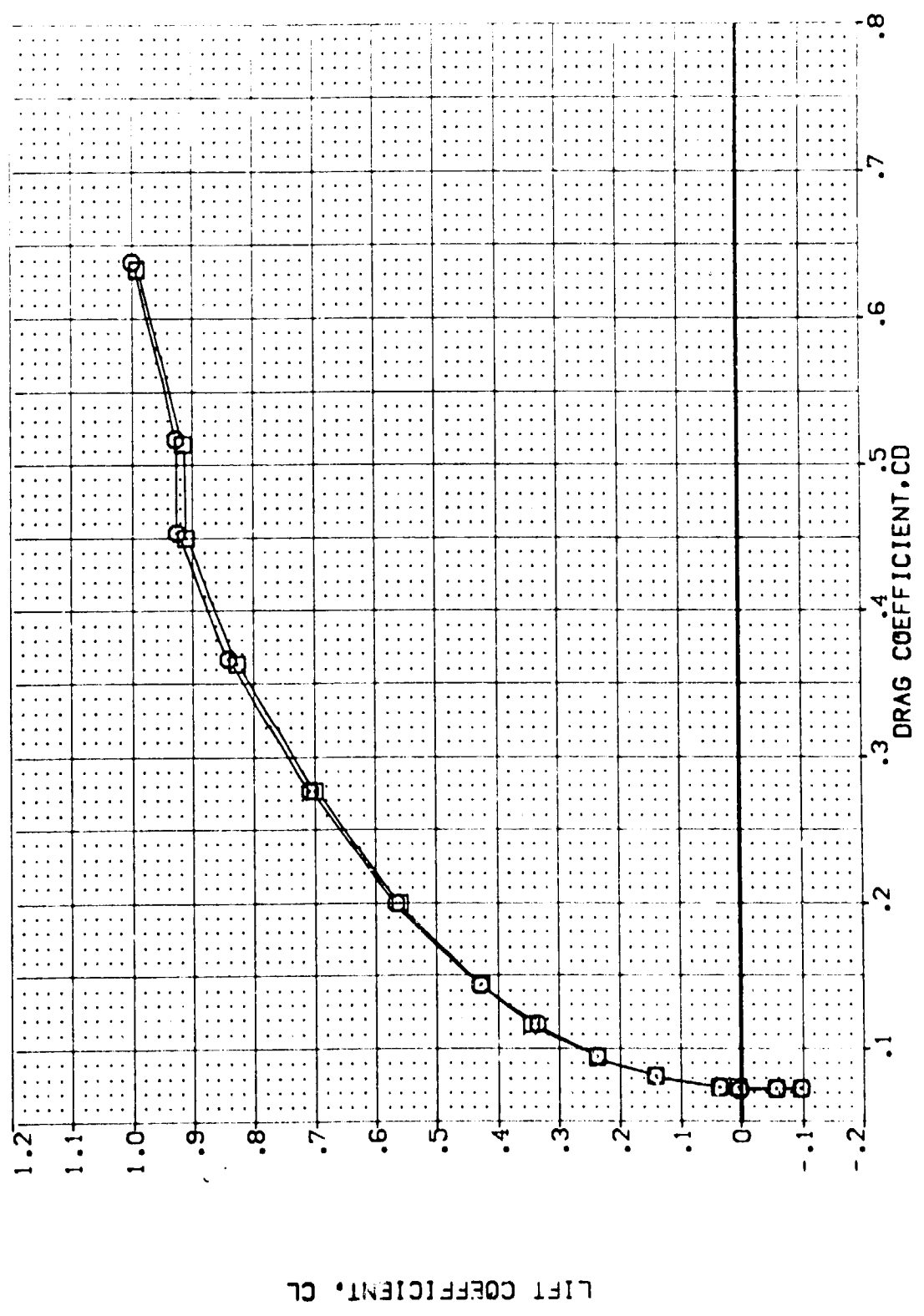


FIG. 6 WING MATRIX  
[C]MACH = .90



DATA SET SYMBOL: (TEJ028) (TEJ016)

CONFIGURATION DESCRIPTION: ARC 11-747 DA53A B C M F V2 V NOM: RV/L ARC 11-747 DA53A B C M F V1 V NOM: RV/L

ELEVON: .000 .000 .000

AILERON: .000 .000 .000

BOFLAP: .000 .000 .000

SPOBRK: 25.000 25.000 25.000

REFERENCE INFORMATION:

SREF	2.4210	50. FT.
LREF	14.2440	IN.
BREF	28.1004	IN.
XMRP	32.3010	IN.
YMRP	.0000	IN.
ZMRP	11.2500	IN.
SCALE	.0300	SCALE

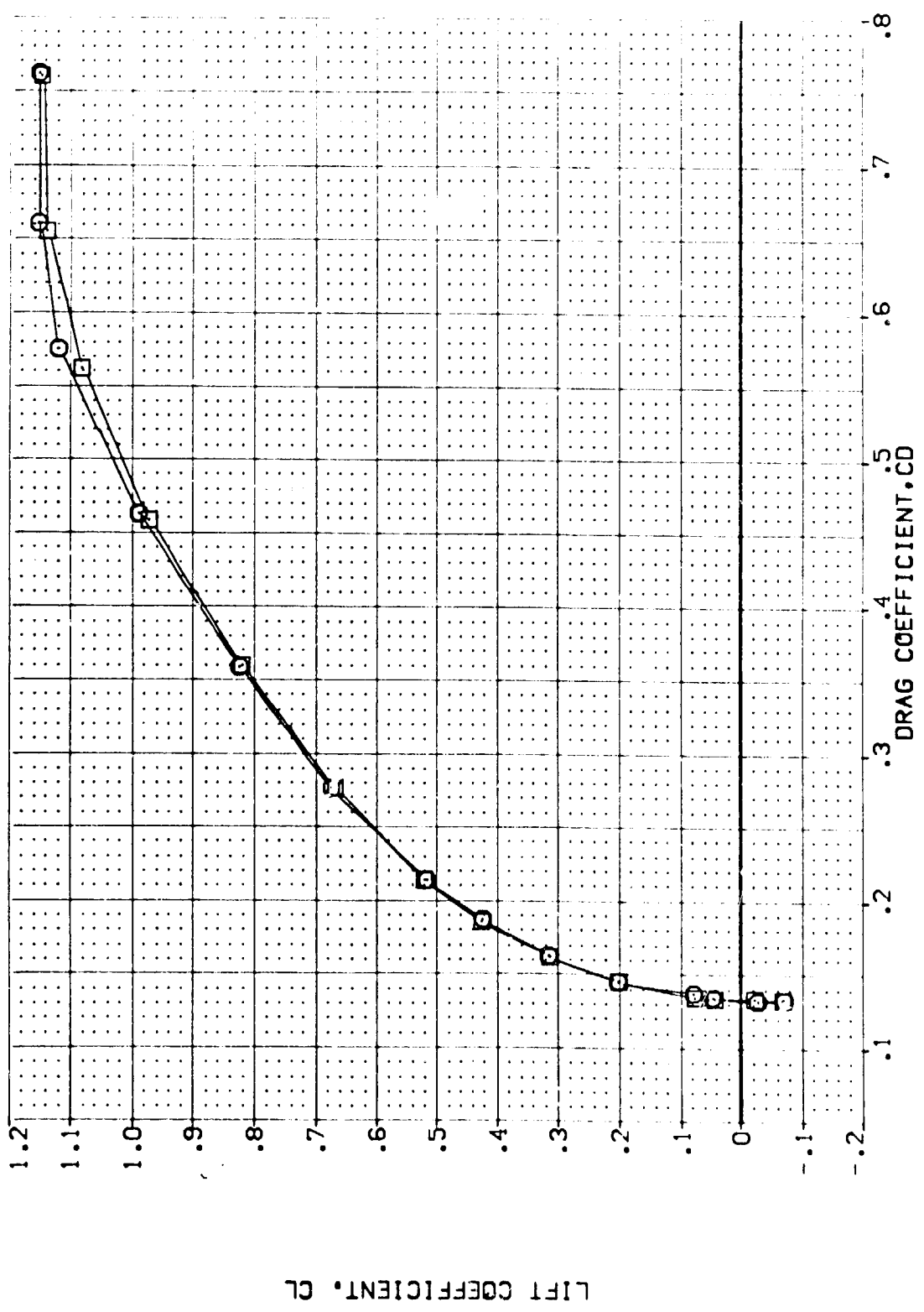


FIG. 6 WING MATRIX  
(CD)MACH = 1.05



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILTRON	BDFLAP	SPOBRK	REFERENCE INFORMATION
{TEJ028}	ARC 11-747 BAS3A B C M F V2 V	.000	.000	.000	25.000	SREF 2.4210 SQ.FT.
{TEJ016}	ARC 11-747 BAS3A B C M F V1 V	.000	.000	.000	25.000	LREF 14.2440 IN.
						BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300 SCALE

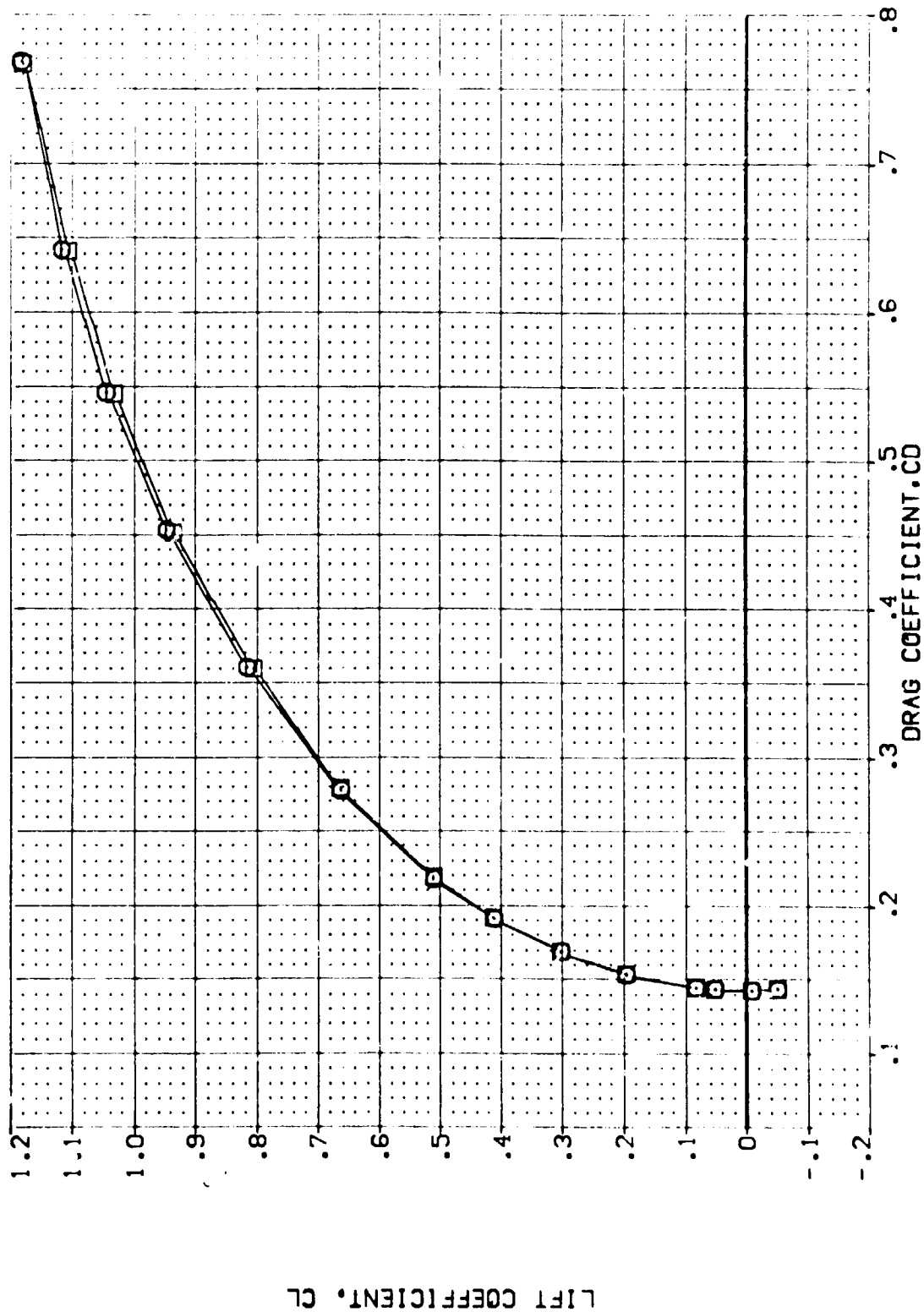


FIG. 6 WING MATRIX  
(M)MACH = 1.20



DATA SET SYMBOL: (TEJ028) (TEJ016)  
CONFIGURATION DESCRIPTION: ARC 11-747 DA53A B C M F V2 V NOM: RV/L  
ARC 11-747 DA53A B C M F V1 V NOM: RV/L  
ELEVON: .000 .000  
AILRON: .000 .000  
BDF LAP: .000 .000  
STOBRK: 25.000 25.000  
REFERENCE INFORMATION:  
SREF: 2.4210 50.0 FT.  
LREF: 14.2440 IN.  
BREF: 28.1004 IN.  
XMRP: 32.3010 IN.  
YMRP: .0000 IN.  
ZMRP: 11.2500 IN.  
SCALE: .0300 SCALE

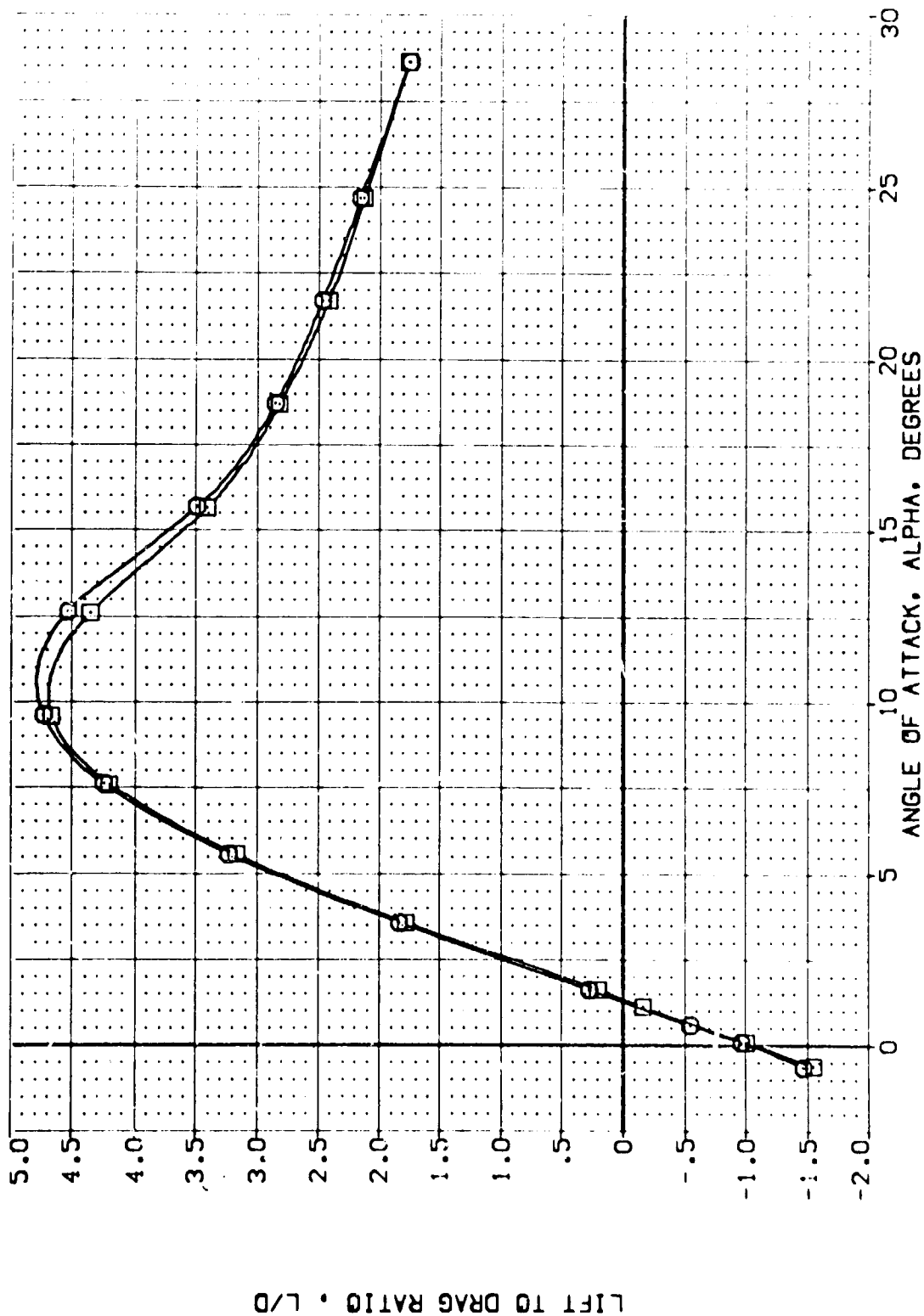


FIG. 6 WING MATRIX

(MACH = .60)

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPDBRK	REFERENCE INFORMATION
[TEJ028]	ARC 11-747 QAS3A B C H F V2 V	.000	.000	.000	25.000	SREF 2.4210 SO.FT.
[TEJ016]	ARC 11-747 QAS3A B C H F V1 V	.000	.000	.000	25.000	LREF 14.2440 IN.
						BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

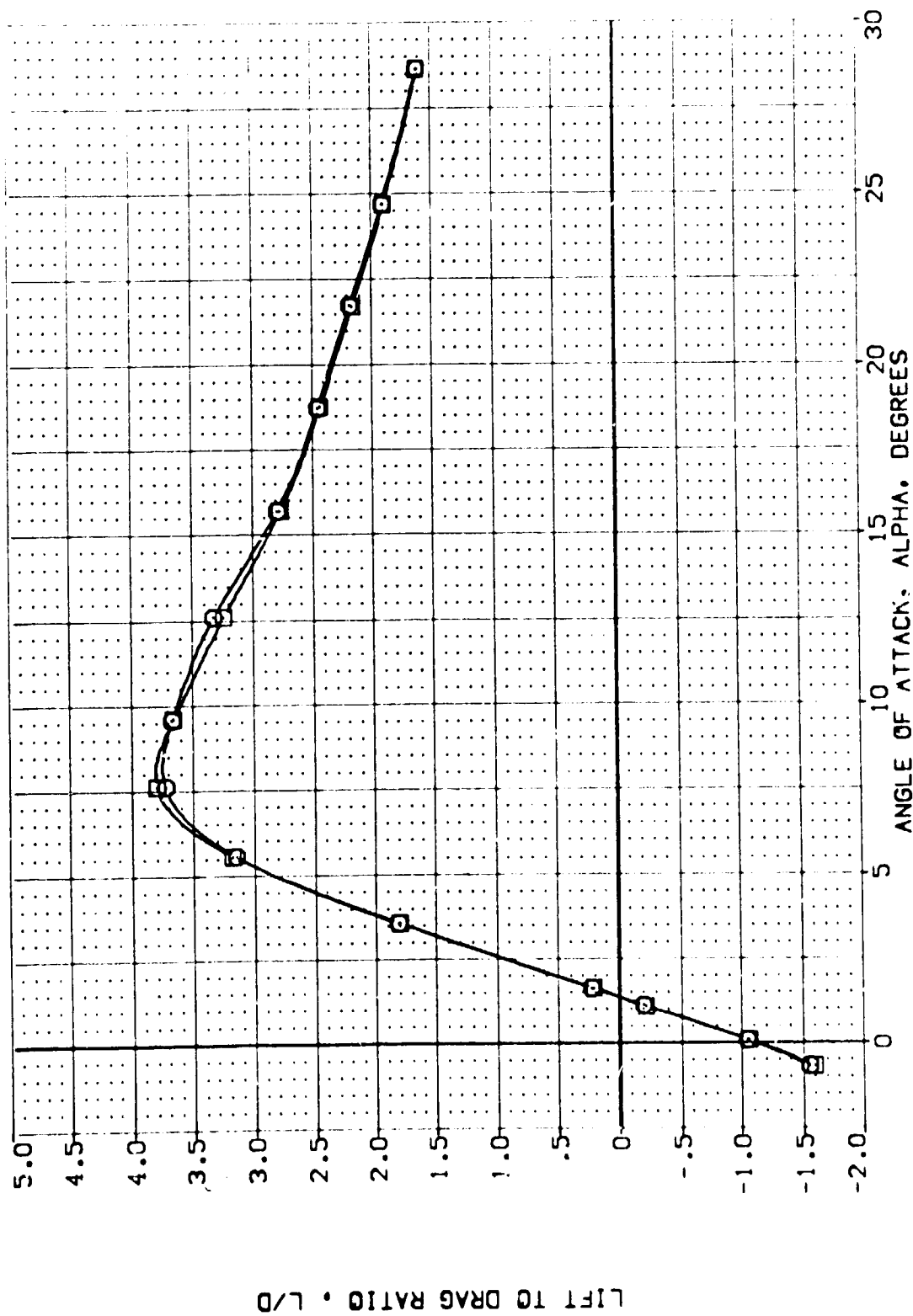


FIG. 6 WING MATRIX

(B)MACH = .80



DATA SET SYMBOL: [TEJ079] [YEJ016] [ ]  
CONFIGURATION DESCRIPTION: ARC 11-747 QAS3A B C M F V2 V NON: PAUL  
ARC 11-747 QAS3A B C M F V1 V NON: PAUL  
ELEVON: .000 .000 .000  
AILRON: .000 .000 .000  
BDF LAP: .000 .000 .000  
SPDBRK: 25.000 25.000 25.000  
REFERENCE INFORMATION:  
SREF: 2.4210 SQ.FT.  
LREF: 14.2440 IN.  
BREF: 28.1004 IN.  
XMRP: 32.3010 IN.  
YMRP: .0000 IN.  
ZMRP: 11.2500 IN.  
SCALE: .0300

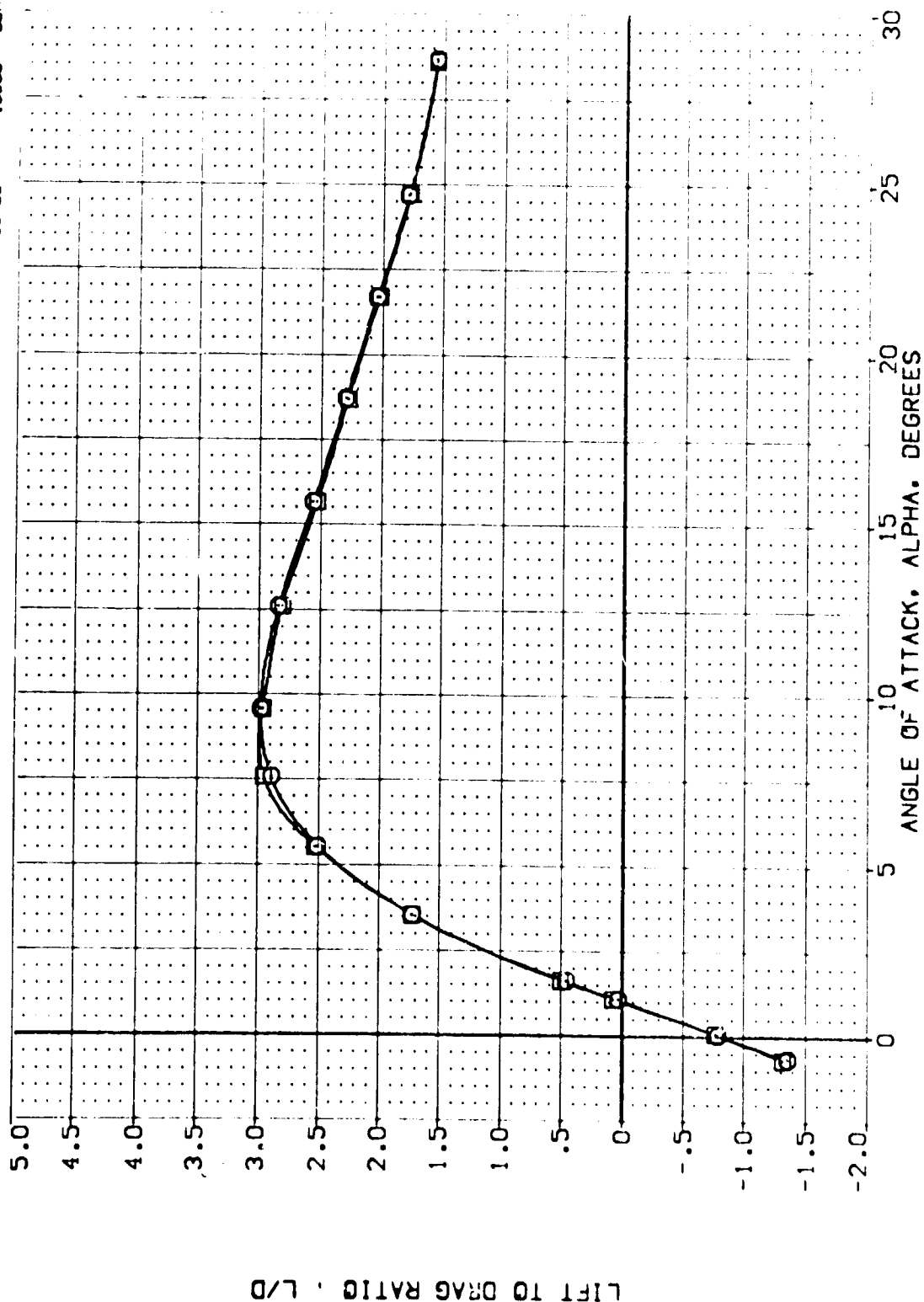


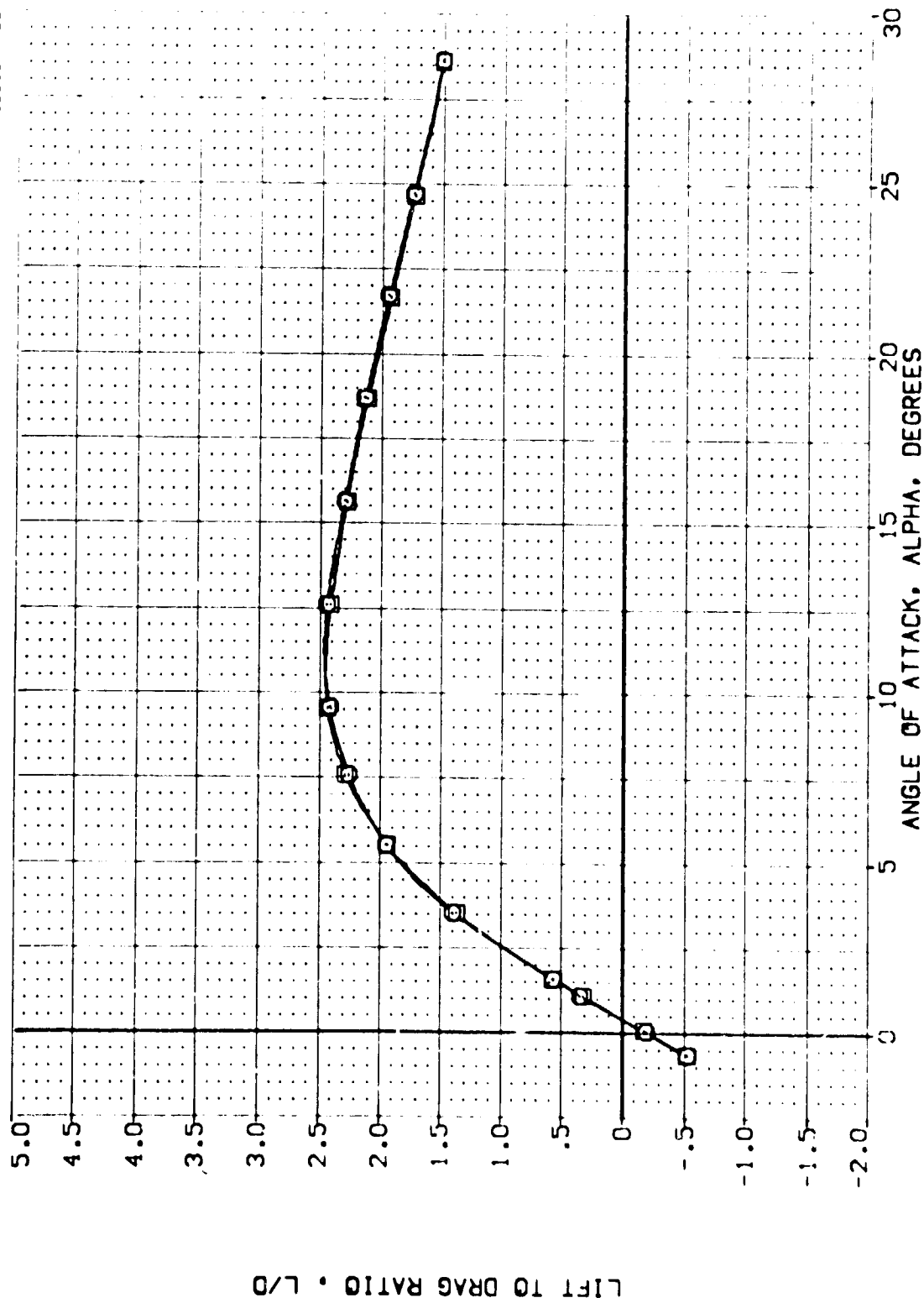
FIG. 6 WING MATRIX

(C)MACH = .90

DATA SET SYMBOL	CONFIGURATION	DESCRIPTION
(TEJ020)	ARC 11-747 0A53A	B C H F V2
(TEJ016)	ARC 11-747 0A53A	B C H F V1

ELEVON	AIRLON	BOFLAP	SPDRBK
.000	.000	.000	25.000
.000	.000	.000	25.000

REFERENCE INFORMATION	
SREF	2.4210 SQ.FT.
LREF	14.2440 IN.
BREF	28.1004 IN.
XMRP	32.3010 IN.
YMRP	.0000 IN.
ZMRP	11.2500 IN.
SCALE	.0300 SCALE



**FIG. 6 WING MATRIX**

COPIES = 1.05



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPORBK	REFERENCE INFORMATION
(TEJ028)	ARC 11-747 DAS3A B C H F V2 V	.000	.000	.000	25.000	SREF 2.4210 SQ.FT.
(TEJ016)	ARC 11-747 DAS3A B C H F V1 V	.000	.000	.000	25.000	LREF 14.2410 IN.
						BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP .0000 IN.
						SCALE 11.7500

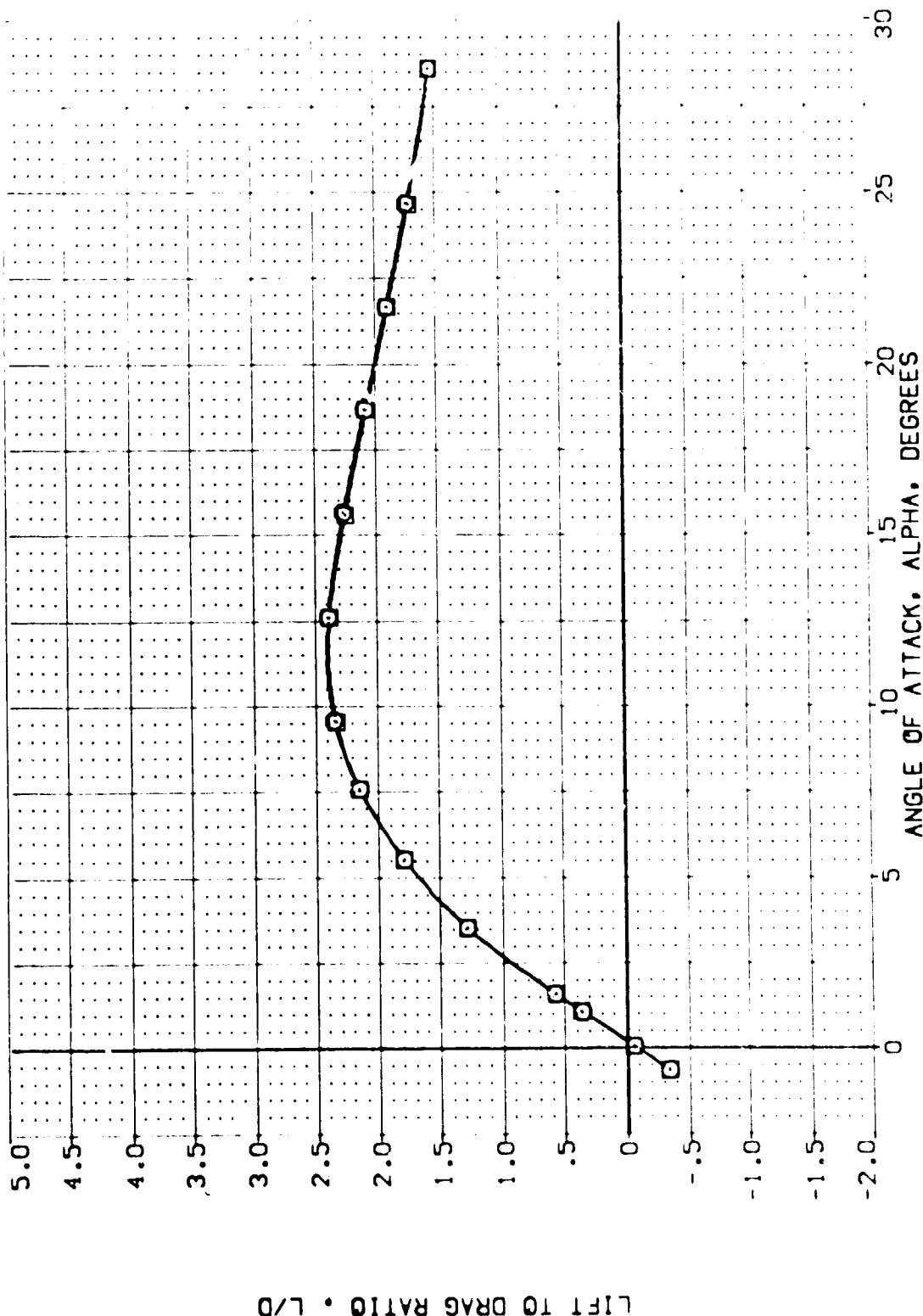


FIG. 6 WING MATRIX

(E)MACH = 1.20

DATA SET SYMBOL

CONFIDENTIAL	DESCRIPTION
ARC 11-147	PA53A B Q H F V2
ARC 11-147	PA53A B Q H F V1

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ELEVEN	AIRLON	BOFLAP	SPORRK
.000	.000	.000	25.000
.000	.000	.000	25.000

REFERENCE INFORMATION	
SREF	2.421C
LREF	14.244C
BREF	28.1004
XPREF	32.301C
YREF	.0000
ZREF	11.2500
SCALE	.0300

LONGITUDINAL CENTER OF PRESSURE/BODY LENGTH, XCP/L

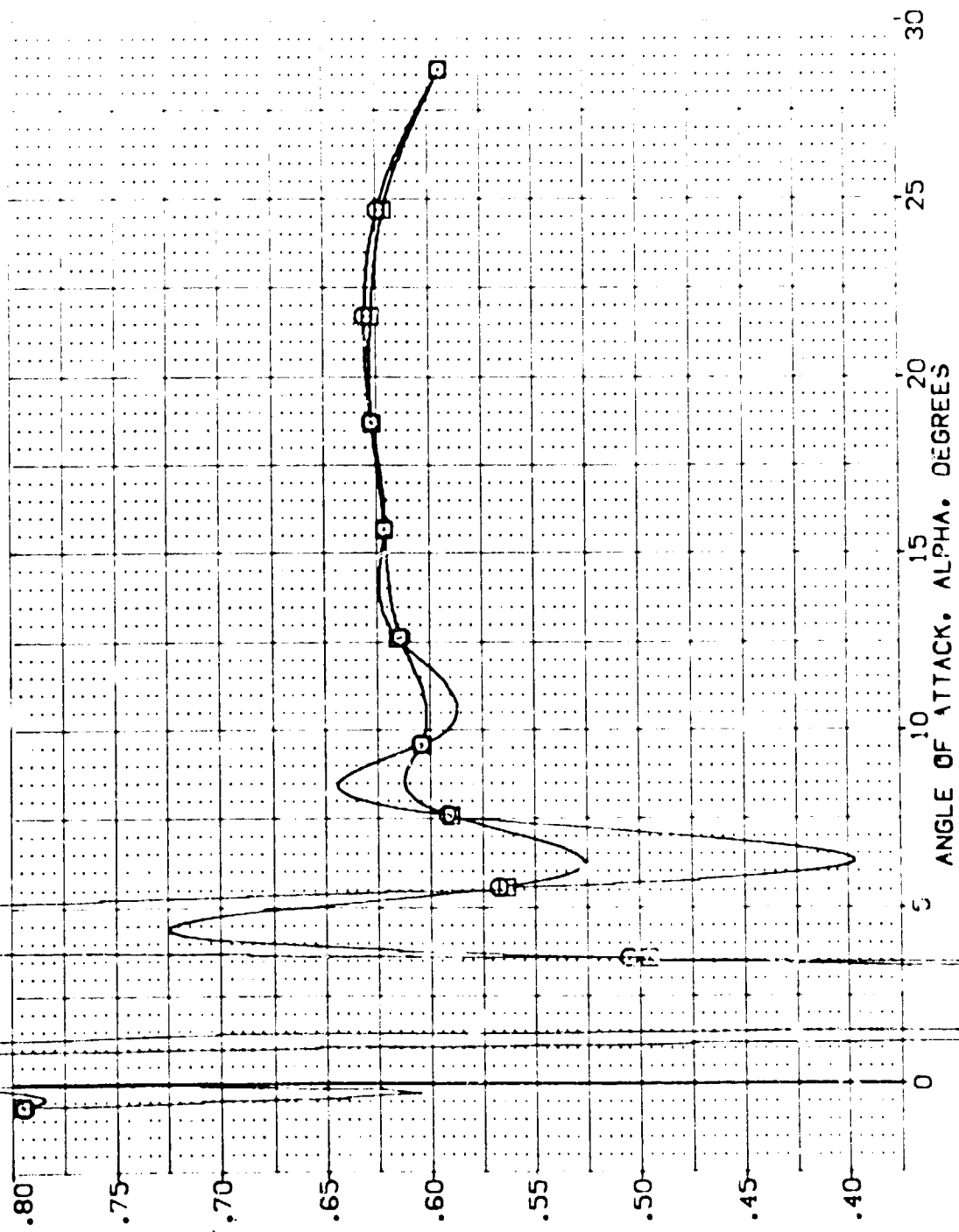


FIG. 6 WING MATRIX



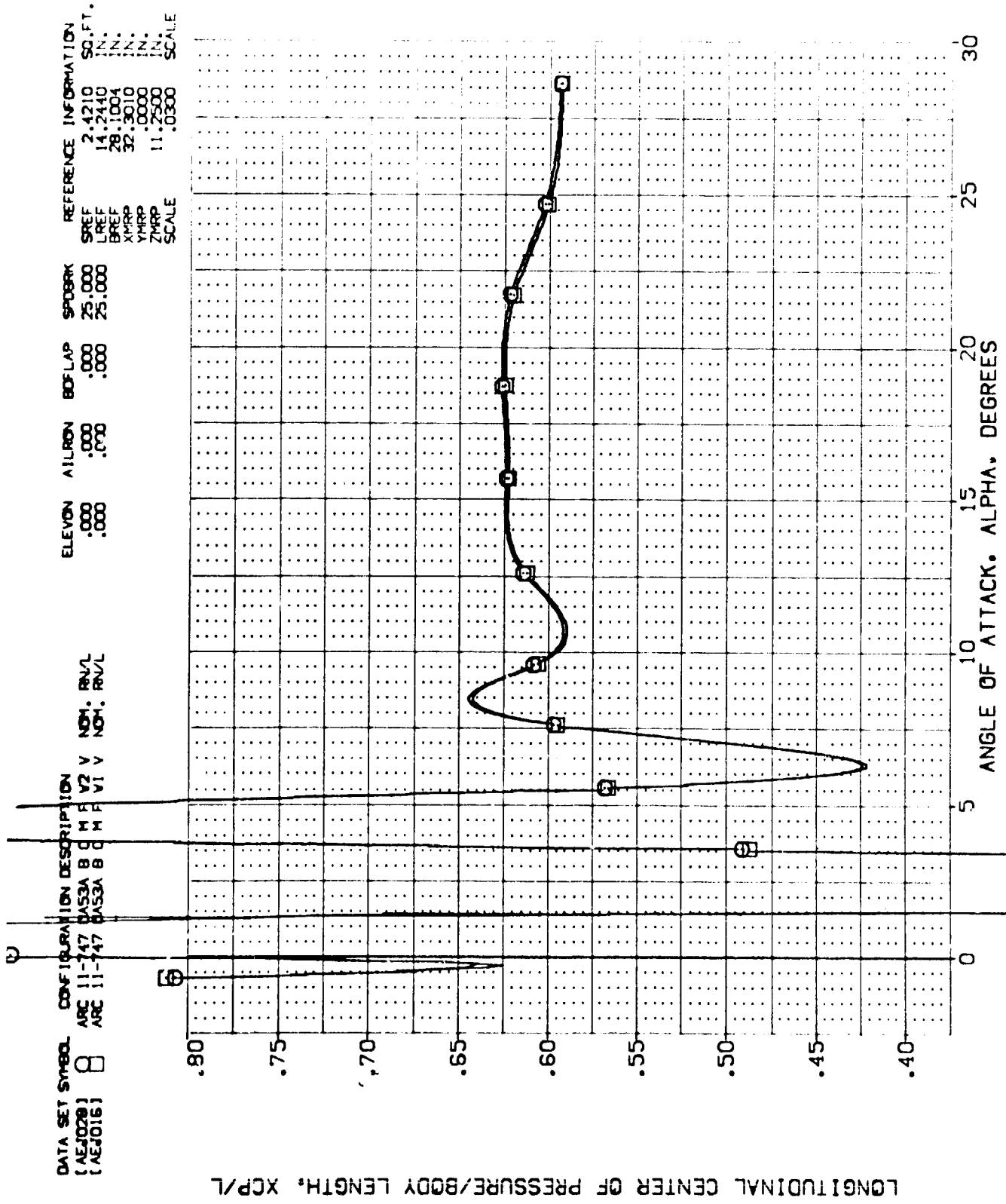


FIG. 6 WING MATRIX

(B)MACH = .80

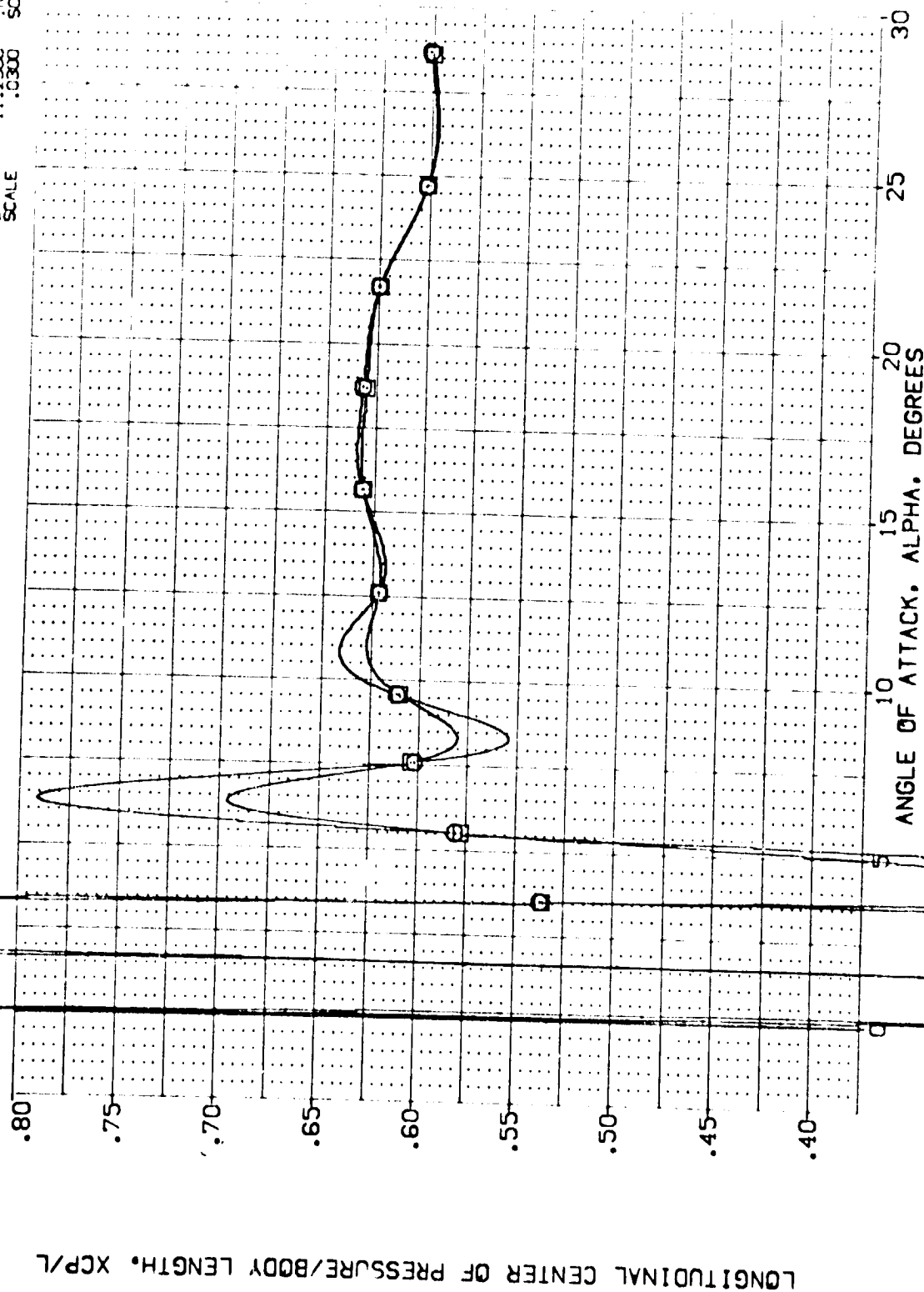
DATA SET SYMBOL  
( AEJ028 )  
( AEJ016 )

CONF	IGATION	DESCRIPTION
ARC 1	-747	QA53A B/C M/F V2
ARC 1	-747	QA53A B/C M/F V1

2000

ELEVEN	AIRLON	BDFLAP	SPD8RK
.000	.000	.000	25.000
.000	.000	.000	25.000

REFERENCE INFORMATION	
SREF	2.4210 SQ. FT.
LREF	14.2440 IN.
BREF	28.1004 IN.
XREF	32.3010 IN.
YREF	0.0000 IN.
ZREF	11.2500 IN.
SCALE	.0300 SCALE



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DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AIRLON	BDFLAP	SPDBRK	REFERENCE INFORMATION	
(AEJ028)	ARC 11-747 BAS3A B C M F V2 V	.000	.000	.000	25.000	SREF	2.4210 SQ.FT.
(AEJ016)	ARC 11-747 BAS3A B C M F V1 V	.000	.000	.000	25.000	LREF	14.2440 IN.
						BREF	28.1004 IN.
						XMRP	32.3010 IN.
						YMRP	.0000 IN.
						ZMRP	11.2500 IN.
						SCALE	.0300 SCALE

LONGITUDINAL CENTER OF PRESSURE/BODY LENGTH, XCP/L

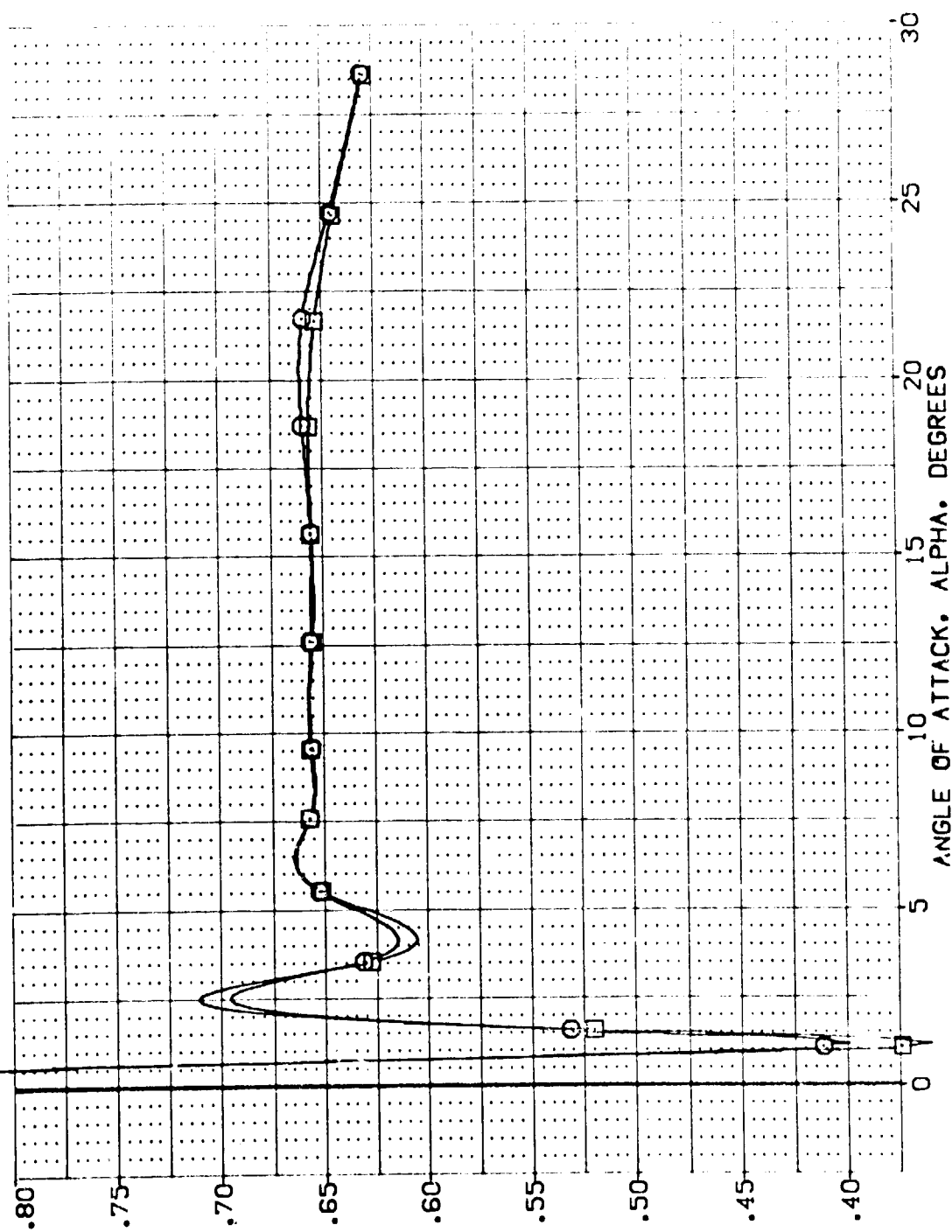


FIG. 6 WING MATRIX

(O)MACH = 1.05



DATA SET SYMBOL CONFIGURATION DESCRIPTION REFERENCE INFORMATION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPDBRK	SREF	2.4210	SQ.FT.
[AE7028]	ARC 11-747 DAS3A B C M F V2 V	.000	.000	.000	25.000	LREF	14.2440	IN.
[AE7016]	ARC 11-747 DAS3A B C M F V1 V	.000	.000	.000	25.000	BREF	28.1004	IN.
						XMRP	32.3010	IN.
						YMRP	.0000	IN.
						ZMRP	11.2500	IN.
						SCALE	.0300	SCALE

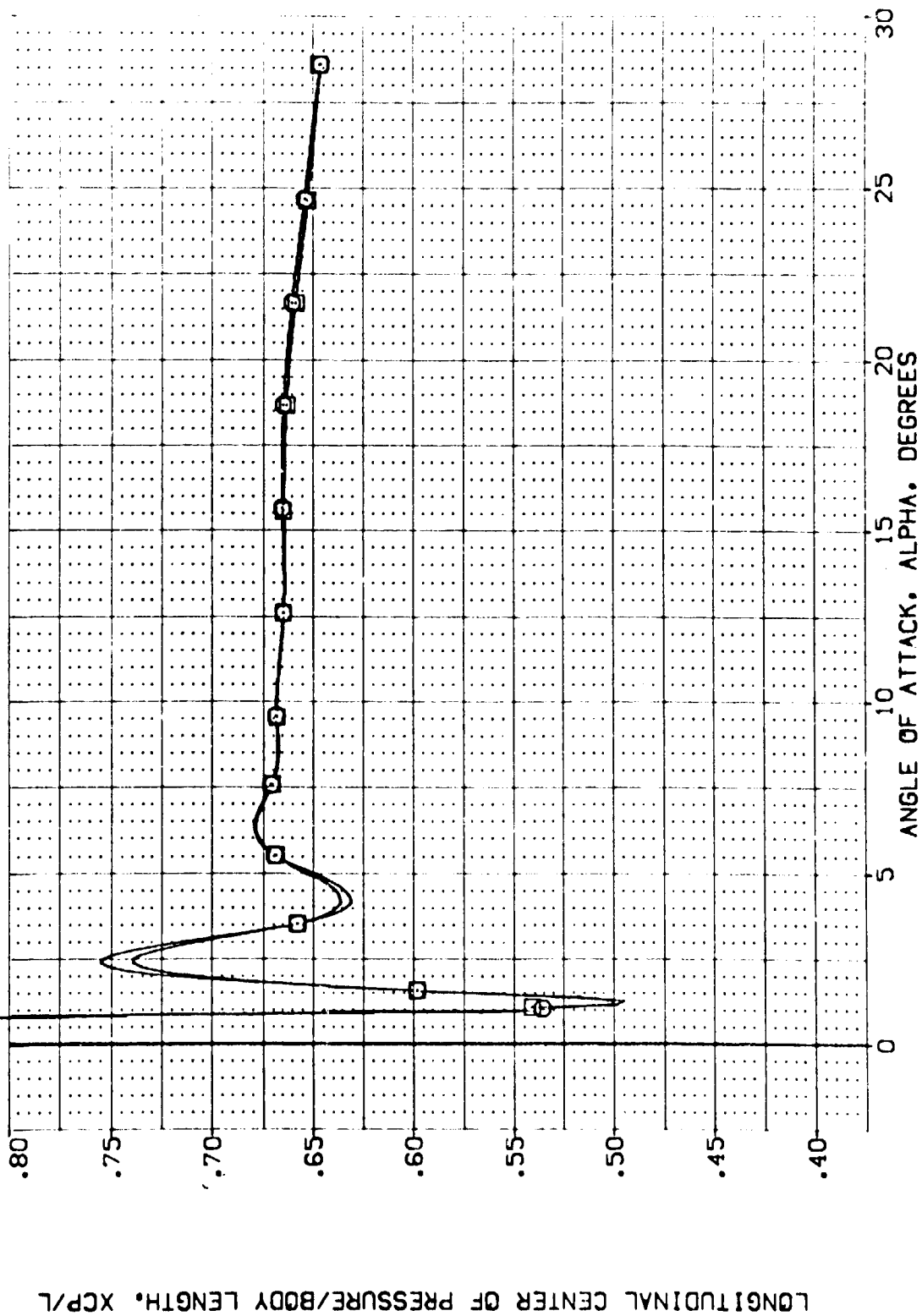
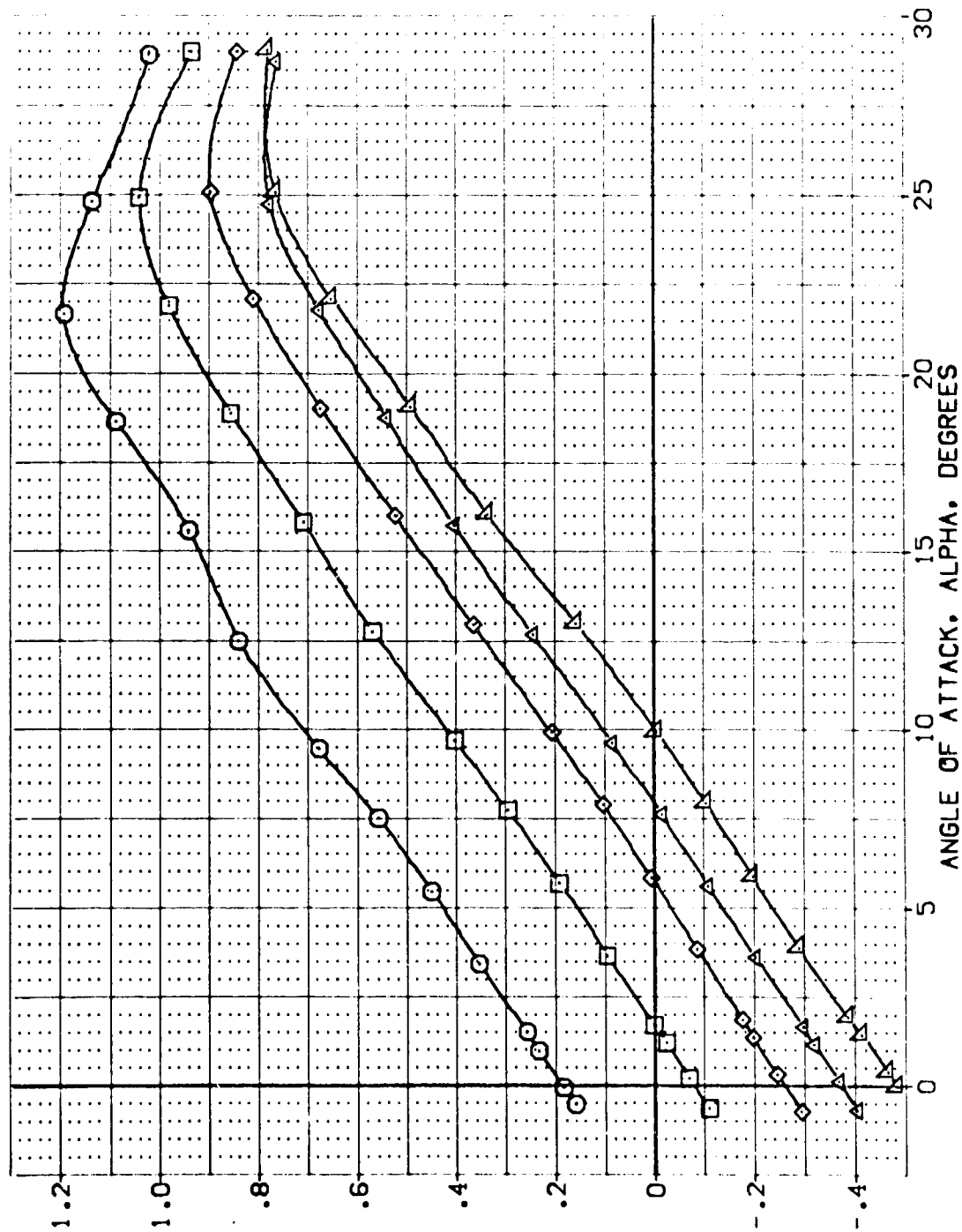


FIG. 6 WING MATRIX

(E)MACH = 1.20

DATA SET SYMBOL    CONFIGURATION DESCRIPTION    ELEVON    AILERON    BOFLAP    SPEED    REFERENCE INFORMATION

(TE4003)	ARC 11-747 DA53A B C M F VI V	15.000	.000	-1.700	25.000	SREF 2.4210
(TE4011)	ARC 11-747 DA53A B C M F VI V	10.000	.000	-1.700	25.000	LREF 14.2440
(TE4002)	ARC 11-747 DA53A B C M F VI V	-10.000	.000	-1.700	25.000	BREF 28.1004
(TE4019)	ARC 11-747 DA53A B C M F VI V	-20.000	.000	-1.700	25.000	XMRP 32.3010
(TE4023)	ARC 11-747 DA53A B C M F VI V	-40.000	.000	-1.700	25.000	ZMRP 11.2500
						SCALE .0300



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FIG. 7 ELEVON EFFECTS

(A)MACH = .60



DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	NON: RV/L	ELEVON	ALTRON	BOFLAP	SPDRBK	REFERENCE INFORMATION
[TE4003]	ARC	11-747 C-53A B C M F V	V	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[TE4011]	ARC	11-747 DA53A B C M F V	V	.000	.000	-11.700	25.000	LREF 14.2440 N.
[TE4002]	ARC	11-747 DA53A B C M F V	V	-10.000	.000	-11.700	25.000	BREF 28.1004 N.
[TE4019]	ARC	11-747 DA53A B C M F V	V	-20.000	.000	-11.700	25.000	XMRP 32.3010 N.
[TE4023]	ARC	11-747 DA53A B C M F V	V	-40.000	.000	-11.700	25.000	YMRP .0000 N.
								ZMRP 11.2500 N.
								SCALE .0300

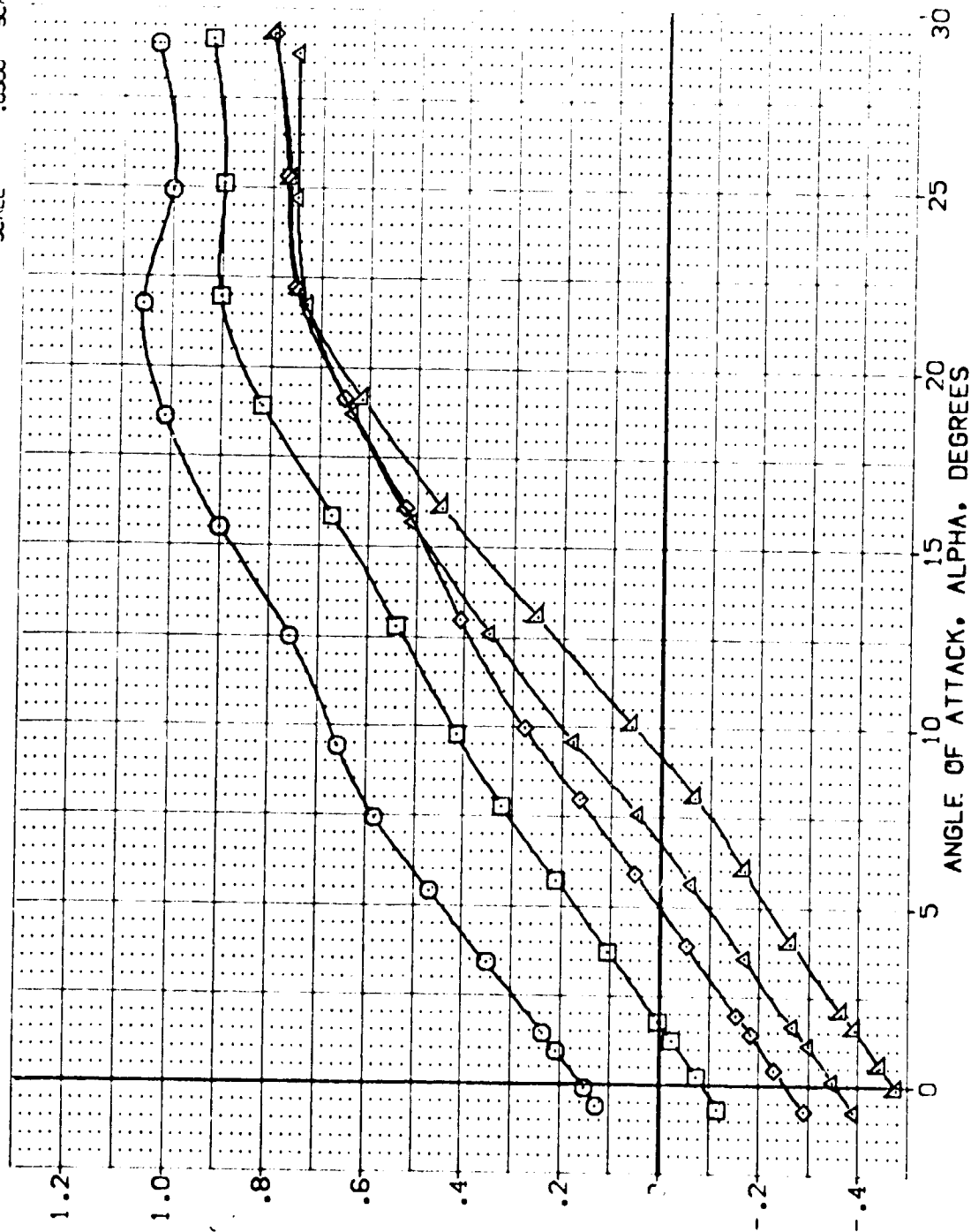
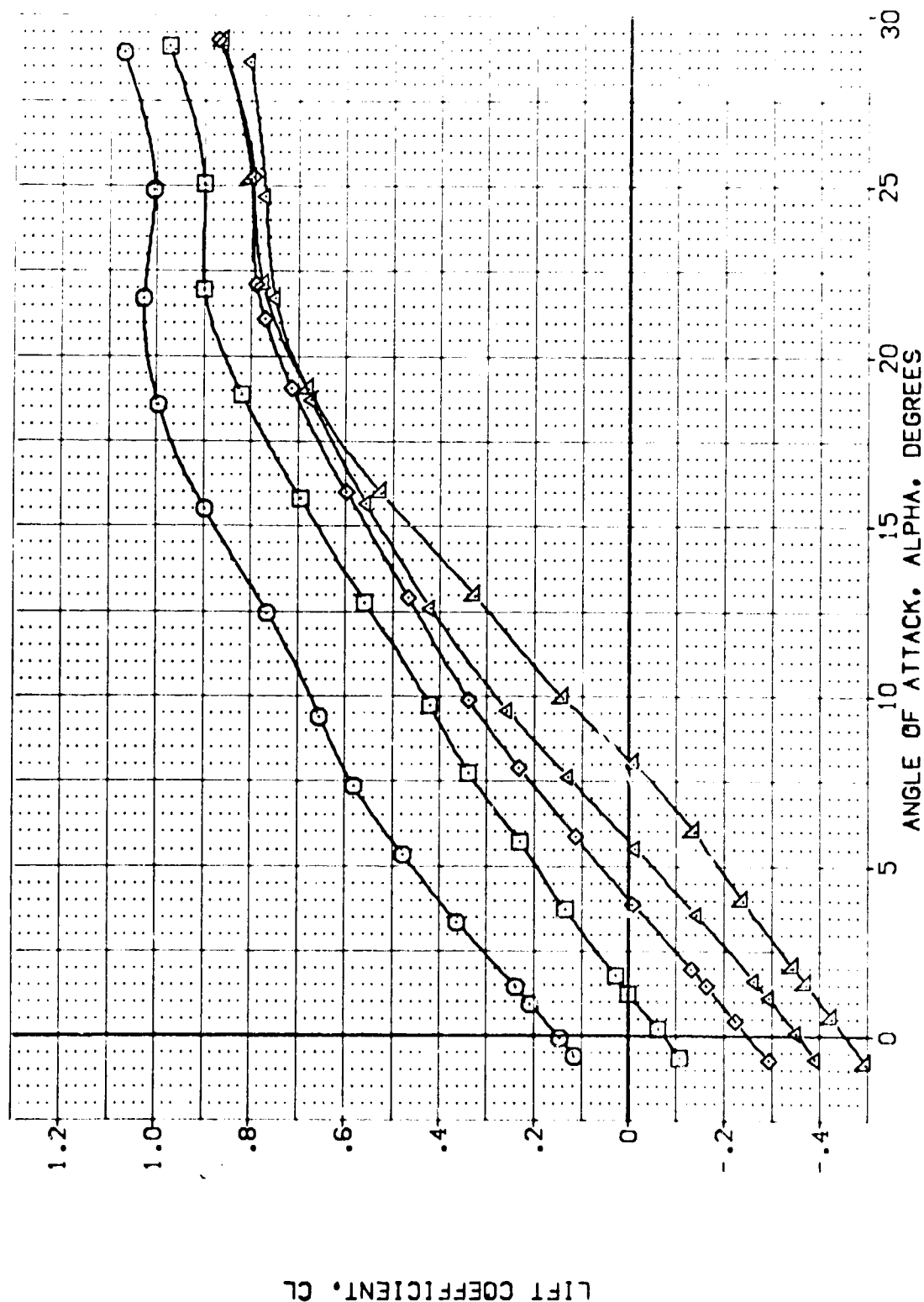


FIG. 7 ELEVON EFFECTS

(B)MACH = .80



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NOT	RV/L	ELEVON	AIRLON	BOFLAP	SPDRK	REFERENCE INFORMATION
(TEJ003)	ARC 11-747 DA53A B C M F VI	Y	RV/L	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(TEJ011)	ARC 11-747 DA53A B C M F VI	V	RV/L	10.000	.000	-11.700	25.000	LPREF 14.2440 IN.
(TEJ002)	ARC 11-747 DA53A B C M F VI	V	RV/L	-10.000	.000	-11.700	25.000	BPREF 28.1004 IN.
(TEJ019)	ARC 11-747 DA53A B C M F VI	V	RV/L	-20.000	.000	-11.700	25.000	YMRP 32.3010 IN.
(TEJ023)	ARC 11-747 DA53A B C M F VI	V	RV/L	-40.000	.000	-11.700	25.000	ZMRP 11.2500 IN.
								SCALE .0300



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILTRON	BOFLAP	SPDRBK	REFERENCE INFORMATION
(TEJ003)	ARC 11-747 DASSA B C M F VI V	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(TEJ011)	ARC 11-747 DASSA B C M F VI V	.000	.000	-11.700	25.000	LREF 14.2440 IN.
(TEJ002)	ARC 11-747 DASSA B C M F VI V	-10.000	.000	-11.700	25.000	BREF 28.1004 IN.
(TEJ019)	ARC 11-747 DASSA B C M F VI V	-20.000	.000	-11.700	25.000	XMRP 32.3010 IN.
(TEJ023)	ARC 11-747 DASSA B C M F VI V	-40.000	.000	-11.700	25.000	YMRP 11.2500 IN.
						SCALE .0300 IN.

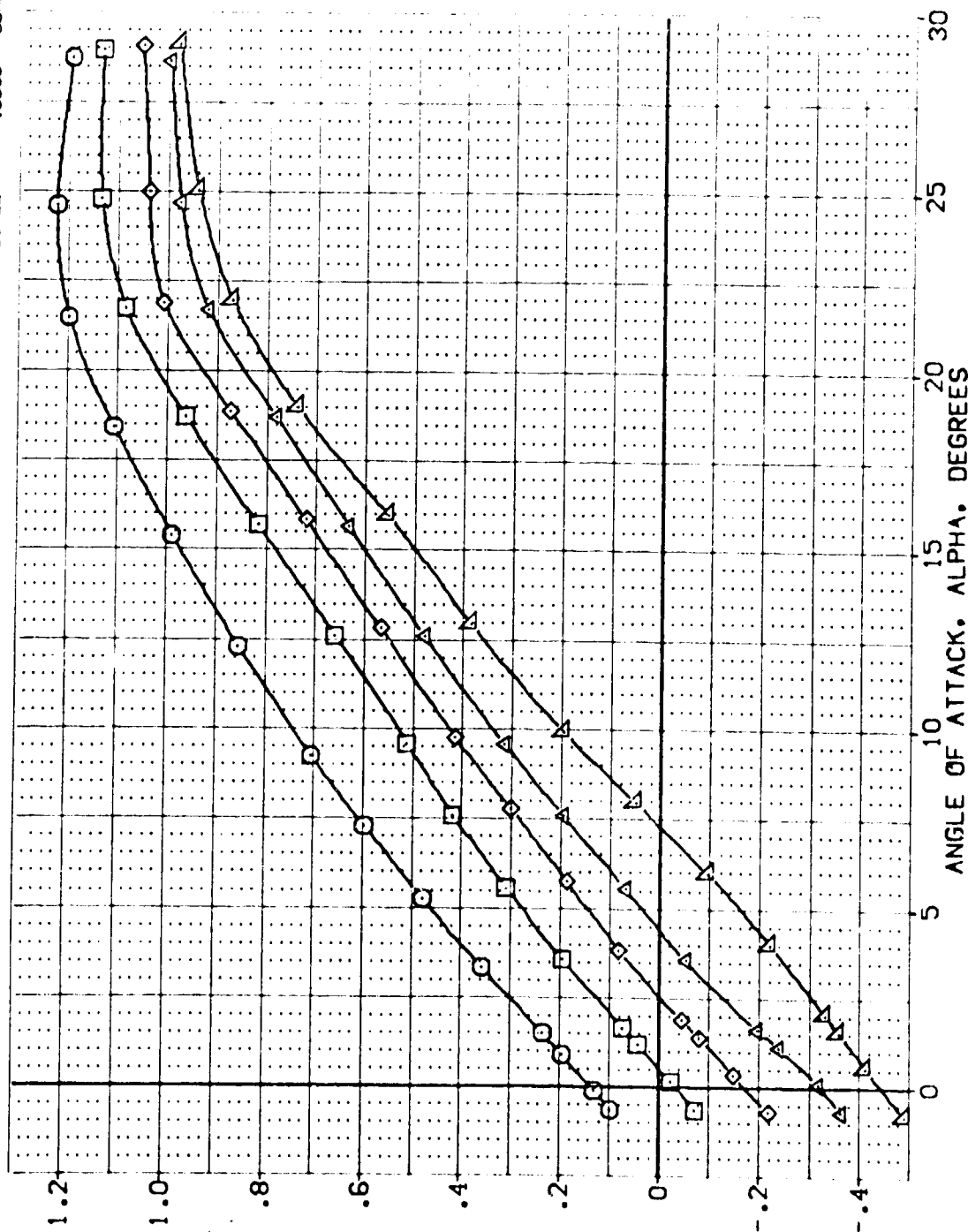


FIG. 7 ELEVON EFFECTS

(CD)MACH = 1.05





DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NOT: RV/L	ELEVON	AIRLON	BDLAP	SPOBRK	REFERENCE INFORMATION
(TEJ003)	ARC 11-747 0/53A B C M F VI V	NOT: RV/L	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(TEJ011)	ARC 11-747 0/53A B C M F VI V	NOT: RV/L	10.000	.000	-11.700	25.000	LREF 14.2440 IN.
(TEJ002)	ARC 11-747 0/53A B C M F VI V	NOT: RV/L	-10.000	.000	-11.700	25.000	BREF 28.1004 IN.
(TEJ019)	ARC 11-747 0/53A B C M F VI V	NOT: RV/L	-20.000	.000	-11.700	25.000	XMRP 32.3010 IN.
(TEJ023)	AF 11-747 0/53A B C M F VI V	NOT: RV/L	-40.000	.000	-11.700	25.000	YMRP 11.2500 IN.
							SCALE .0300

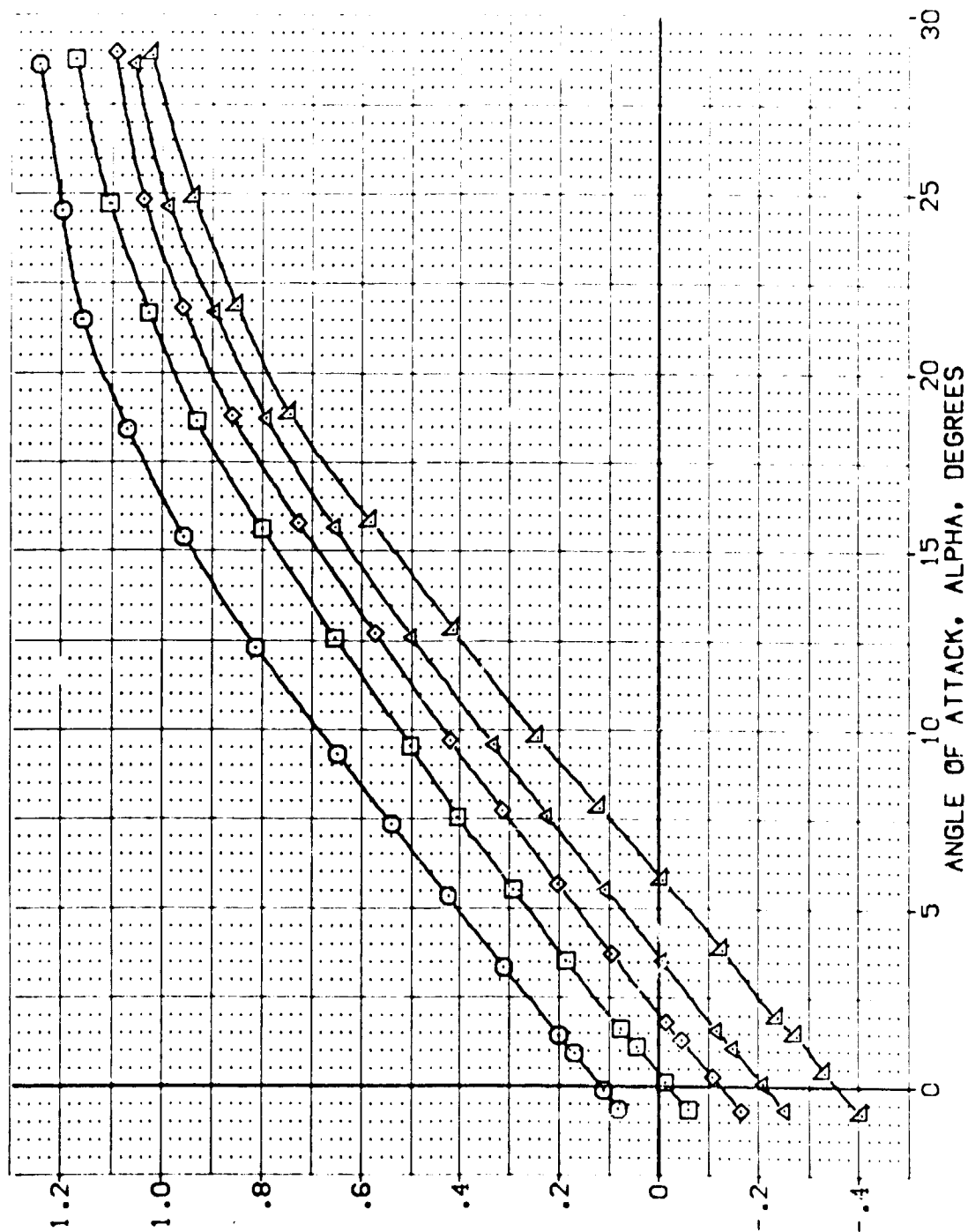


FIG. 7 ELEVON EFFECTS

(E)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPOILER	REFERENCE INFORMATION
(TEJ003)	ARC 11-747 DA53A B C M F VI V	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(TEJ011)	ARC 11-747 DA53A B C M F VI V	.000	.000	-11.700	25.000	LREF 14.2440 IN.
(TEJ002)	ARC 11-747 DA53A B C M F VI V	-10.000	.000	-11.700	25.000	BREF 28.1004 IN.
(TEJ019)	ARC 11-747 DA53A B C M F VI V	-20.000	.000	-11.700	25.000	XMRP 72.3010 IN.
(TEJ023)	ARC 11-747 DA53A B C M F VI V	-40.000	.000	-11.700	25.000	YMRP 11.2500 IN.
						SCALE .0300

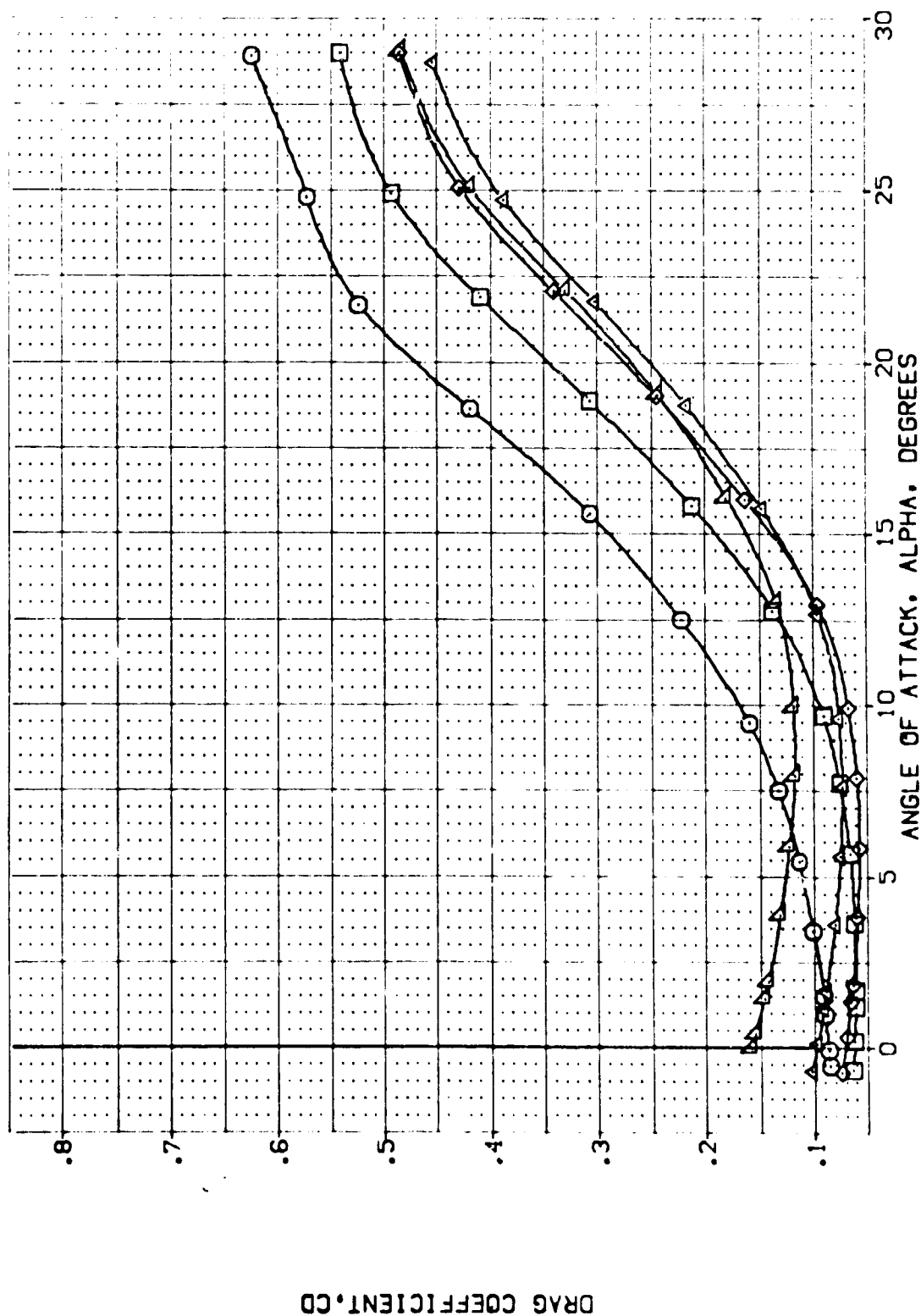


FIG. 7 ELEVON EFFECTS

(A)MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPDRK	REFERENCE INFORMATION
(TEJ003)	ARC 11-747 DA53A B C H F VI V	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(TEJ011)	ARC 11-747 DA53A B C H F VI V	.000	.000	-11.700	25.000	LREF 14.244C IN.
(TEJ002)	ARC 11-747 DA53A B C H F VI V	.000	.000	-11.700	25.000	BREF 28.100C IN.
(TEJ019)	ARC 11-747 DA53A B C H F VI V	-10.000	.000	-11.700	25.000	XMRP 32.3010 IN.
(TEJ023)	ARC 11-747 DA53A B C H F VI V	-40.000	.000	-11.700	25.000	YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

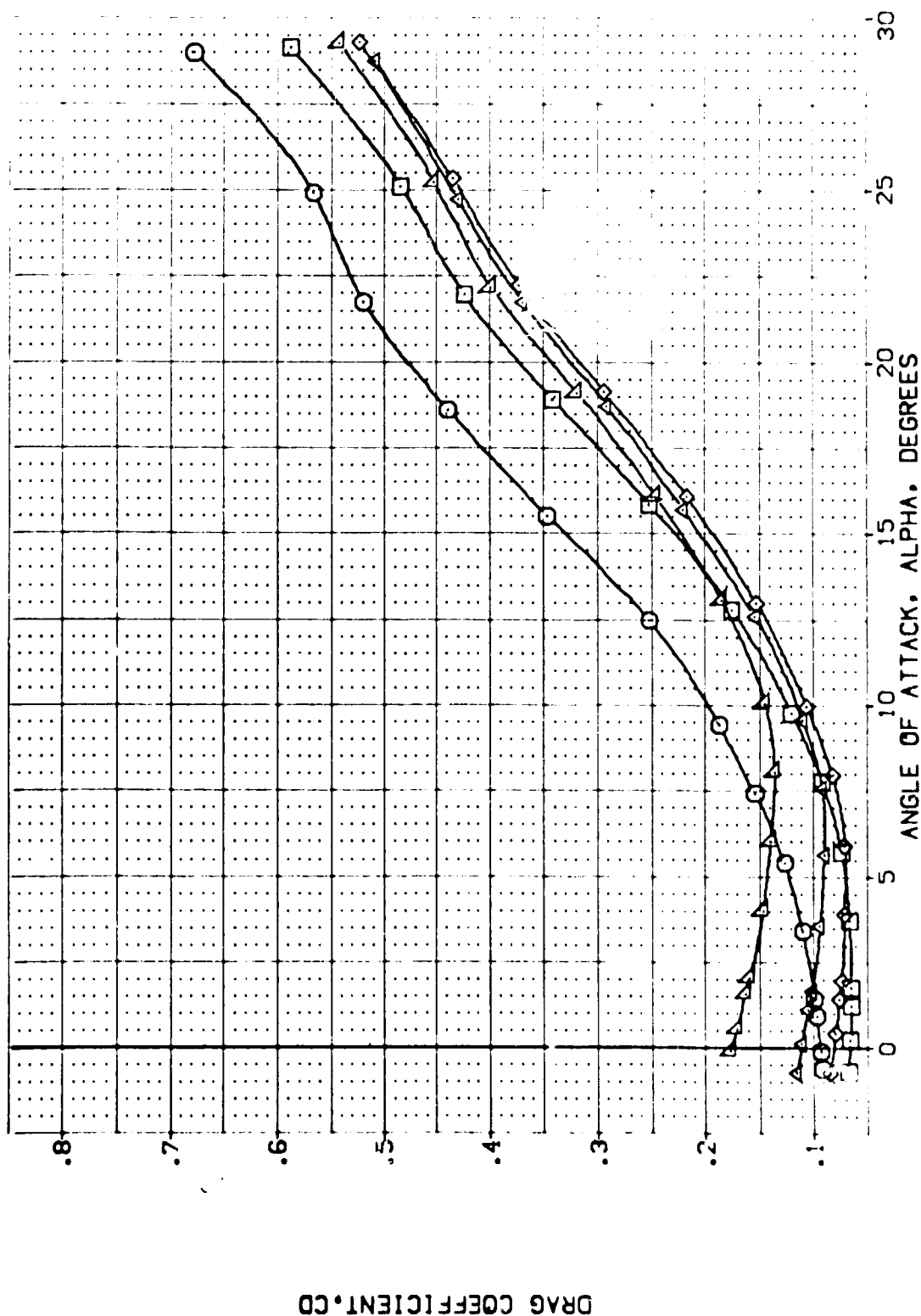


FIG. 7 ELEVON EFFECTS

(B) MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NON: RV/L	ELEVON	AILRON	BOFLAP	SPDBK	REFERENCE INFORMATION
(TEJ003)	ARC 11-747 DA53A B C H F VI V	NON: RV/L	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(TEJ011)	ARC 11-747 DA53A B C H F VI V	NON: RV/L	.000	.000	-11.700	25.000	LREF 14.2440 N.
(TEJ002)	ARC 11-747 DA53A B C H F VI V	NON: RV/L	-10.000	.000	-11.700	25.000	BREF 28.1004 N.
(TEJ019)	ARC 11-747 DA53A B C H F VI V	NON: RV/L	-20.000	.000	-11.700	25.000	XMRP 32.3010 N.
(TEJ023)	ARC 11-747 DA53A B C H F VI V	NON: RV/L	-40.000	.000	-11.700	25.000	YMRP .0000 N.
							Z-MP 11.2500 N.
							SCALE .0300

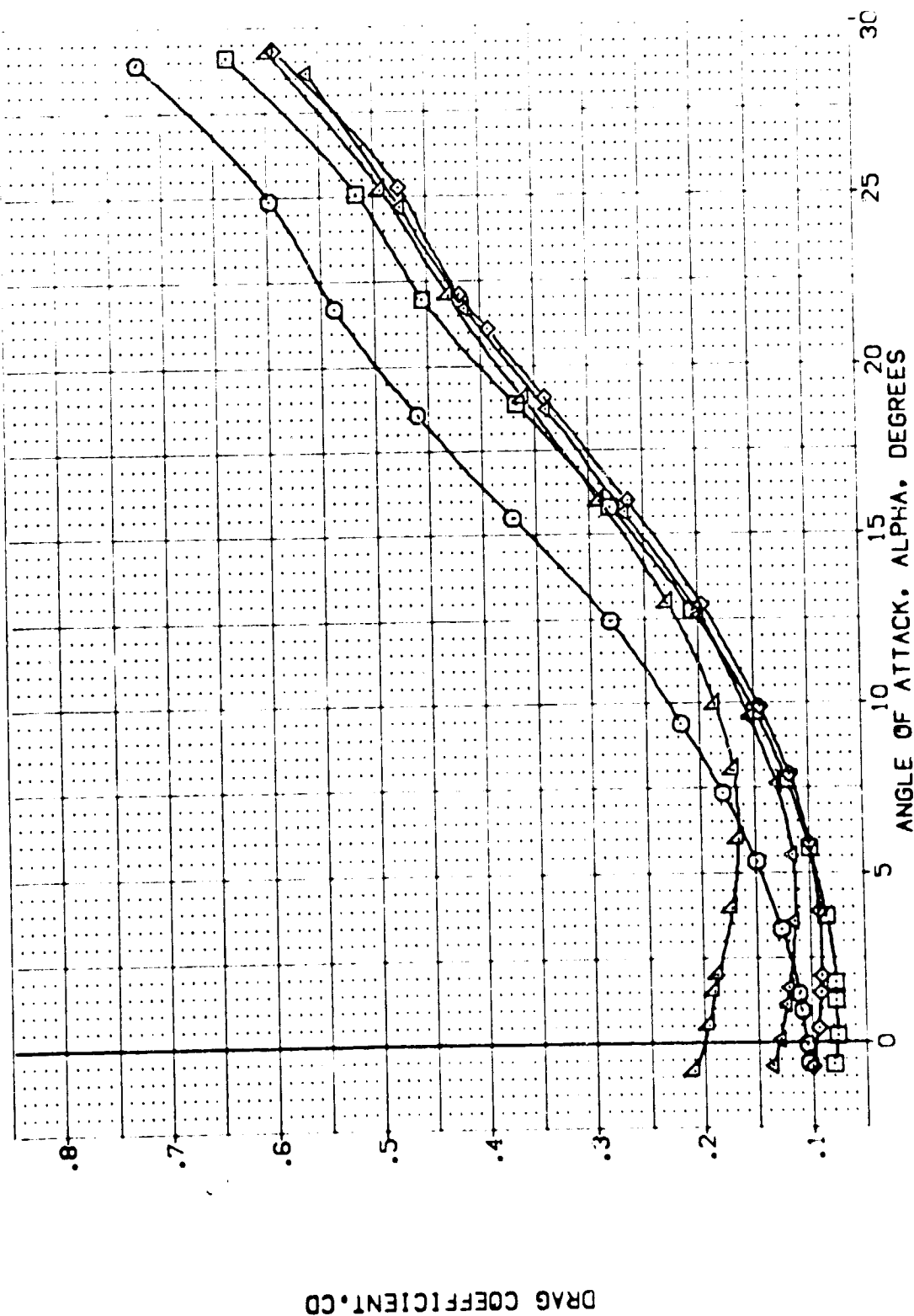


FIG. 7 ELEVON EFFECTS

(C)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NON. RV/L	ELEVON	AILERON	BD/LAP	SPORRK	REFERENCE INFORMATION
(TEJ003)	ARC 11-747 DA53A B C M F VI V	NON. RV/L	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(TEJ011)	ARC 11-747 DA53A B C M F VI V	NON. RV/L	.000	.000	-11.700	25.000	LREF 14.2440
(TEJ002)	ARC 11-747 DA53A B C M F VI V	NON. RV/L	-10.000	.000	-11.700	25.000	BPREF 28.1004
(TEJ019)	ARC 11-747 DA53A B C M F VI V	NON. RV/L	-20.000	.000	-11.700	25.000	XPREF 32.3010
(TEJ023)	ARC 11-747 DA53A B C M F VI V	NON. RV/L	-40.000	.000	-11.700	25.000	YMPREF 11.0000
							SCALE 11.2500

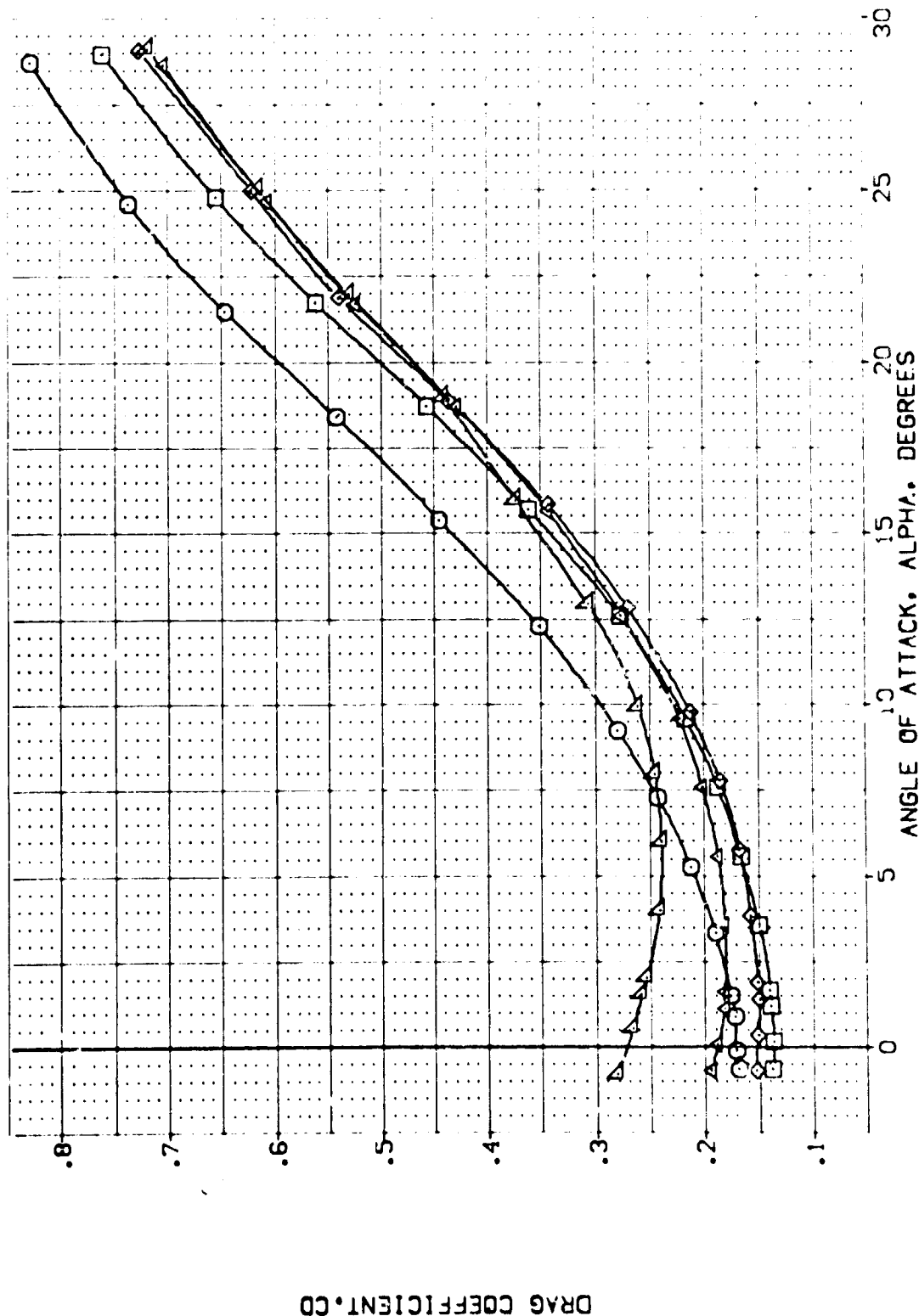


FIG. 7 ELEVON EFFECTS

(O)MACH = 1.05



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPDBRK	REFERENCE INFORMATION
(TEJ003)	ARC 11-747 DA53A B C M F V1 V	15.000	.000	-11.700	25.000	SREF 2.4210 SC.FT.
(TEJ011)	ARC 11-747 DA53A B C M F V1 V	.000	.000	-11.700	25.000	LREF 14.2440 IN.
(TEJ002)	ARC 11-747 DA53A B C M F V1 V	-10.000	.000	-11.700	25.000	BREF 28.1004 IN.
(TEJ019)	ARC 11-747 DA53A B C M F V1 V	-20.000	.000	-11.700	25.000	XMRP 32.3010 IN.
(TEJ023)	ARC 11-747 DA53A B C M F V1 V	-40.000	.000	-11.700	25.000	YMRP .0000 IN.
						ZMRP .0000 IN.
						SCALE .0300

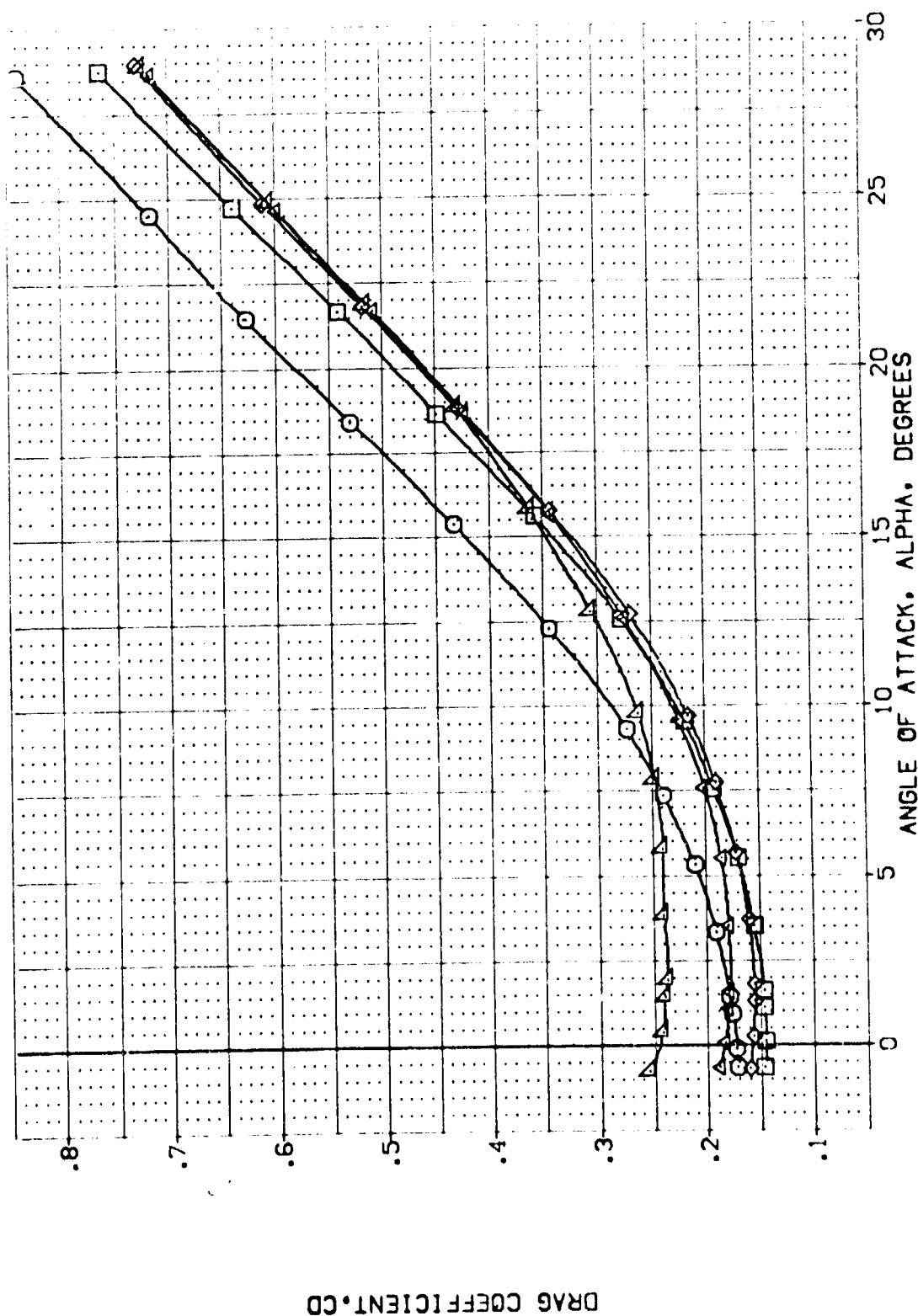


FIG. 7 ELEVON EFFECTS

(E)MACH = 1.20



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NOTES	ELEVON	AILERON	BOFLAP	SPDRBK	REFERENCE INFORMATION
{TEJ003}	ARC 11-747 OAS3A B C M F VI V	RV/L	15.000	.000	-11.700	25.000	SREF 2.4210 50.0 FT.
{TEJ011}	ARC 11-747 OAS3A B C M F VI V	RV/L	15.000	.000	-11.700	25.000	LREF 14.2440
{TEJ002}	ARC 11-747 OAS3A B C M F VI V	RV/L	-10.000	.000	-11.700	25.000	BREF 28.1004
{TEJ019}	ARC 11-747 OAS3A B C M F VI V	RV/L	-20.000	.000	-11.700	25.000	XMRP 32.3010
{TEJ023}	ARC 11-747 OAS3A B C M F VI V	RV/L	-40.000	.000	-11.700	25.000	YMRP .0000
							ZMRP 11.2500
							SCALE .0300

FOREBODY DRAG COEFFICIENT, CDF

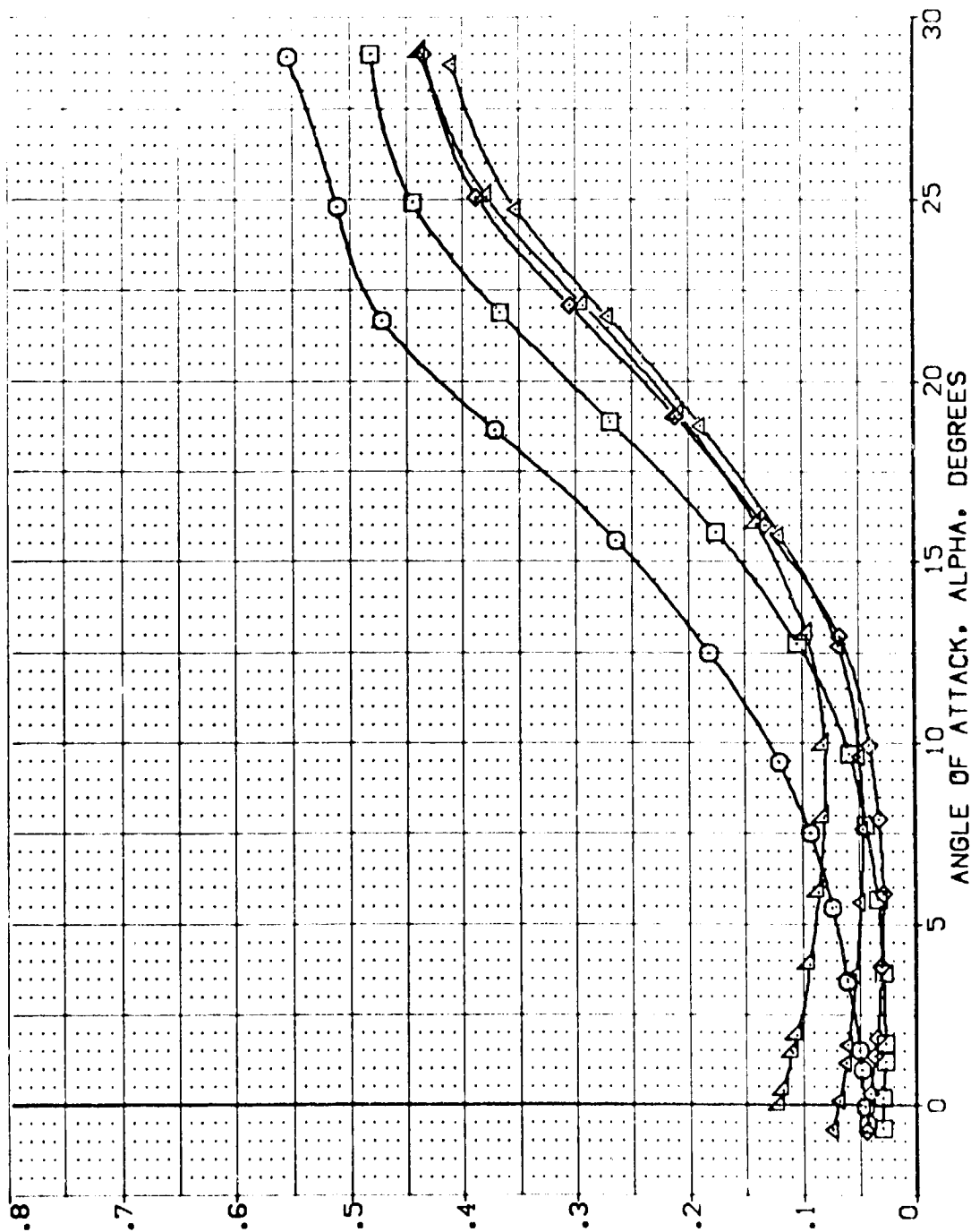


FIG. 7 ELEVON EFFECTS

(A)MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NOI	RV/L	ELEVON	AILERON	BOFLAP	SP00BK	REFERENCE INFORMATION
[TEJ003]	ARC 11-747 OAS3A B C H F VI V	NOI	RV/L	15.000	.000	-11.700	25.000	SREF 2.4210 SC.FT.
[TEJ011]	ARC 11-747 OAS3A B C H F VI V	NOI	RV/L	.000	.000	-11.700	25.000	LREF 14.2440
[TEJ002]	ARC 11-747 OAS3A B C H F VI V	NOI	RV/L	-10.000	.000	-11.700	25.000	BREF 28.1004
[TEJ019]	ARC 11-747 OAS3A B C H F VI V	NOI	RV/L	-20.000	.000	-11.700	25.000	XREF 32.3010
[TEJ023]	ARC 11-747 OAS3A B C H F VI V	NOI	RV/L	-40.000	.000	-11.700	25.000	YREF 11.2500
								SCALE 11.2500

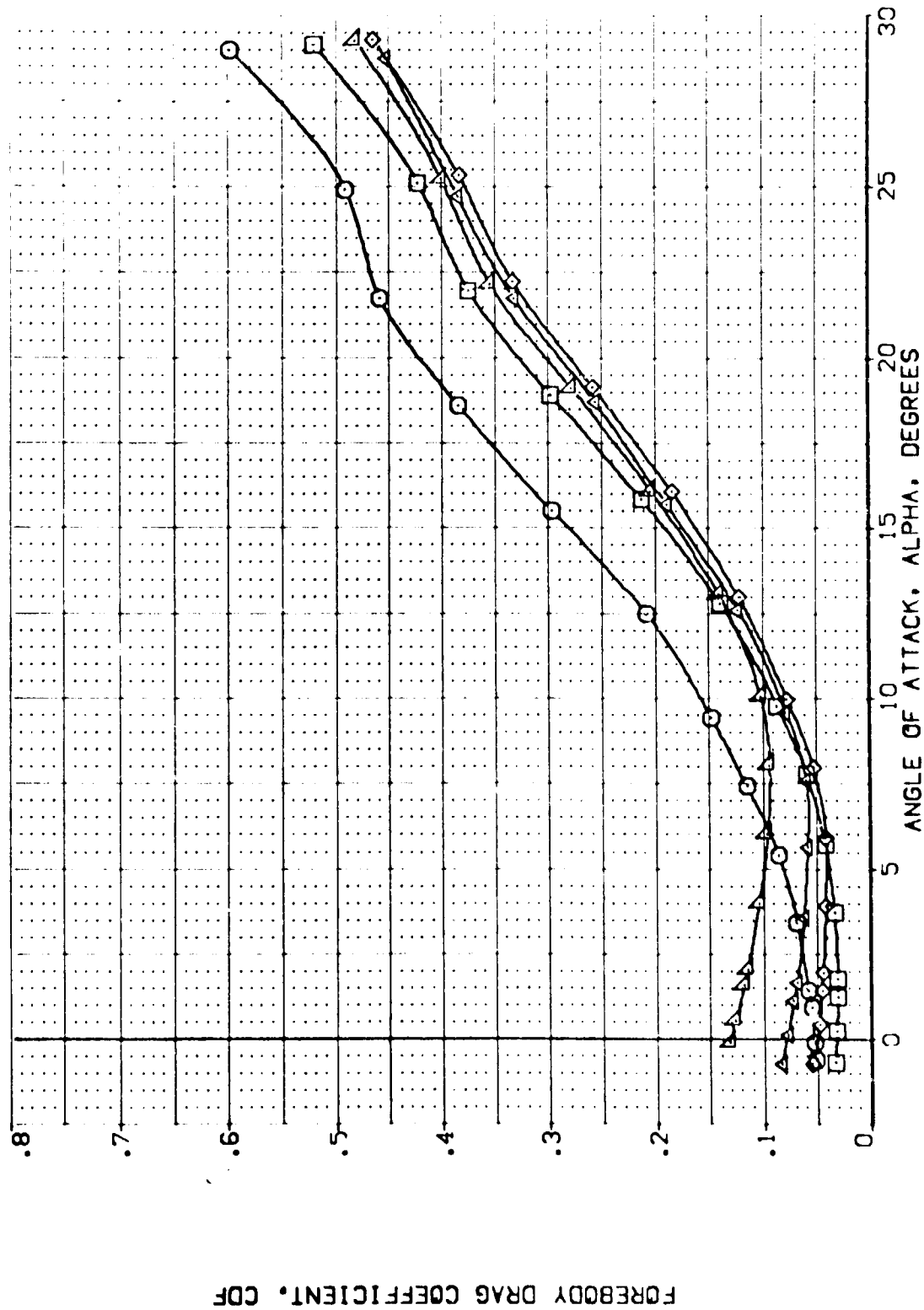


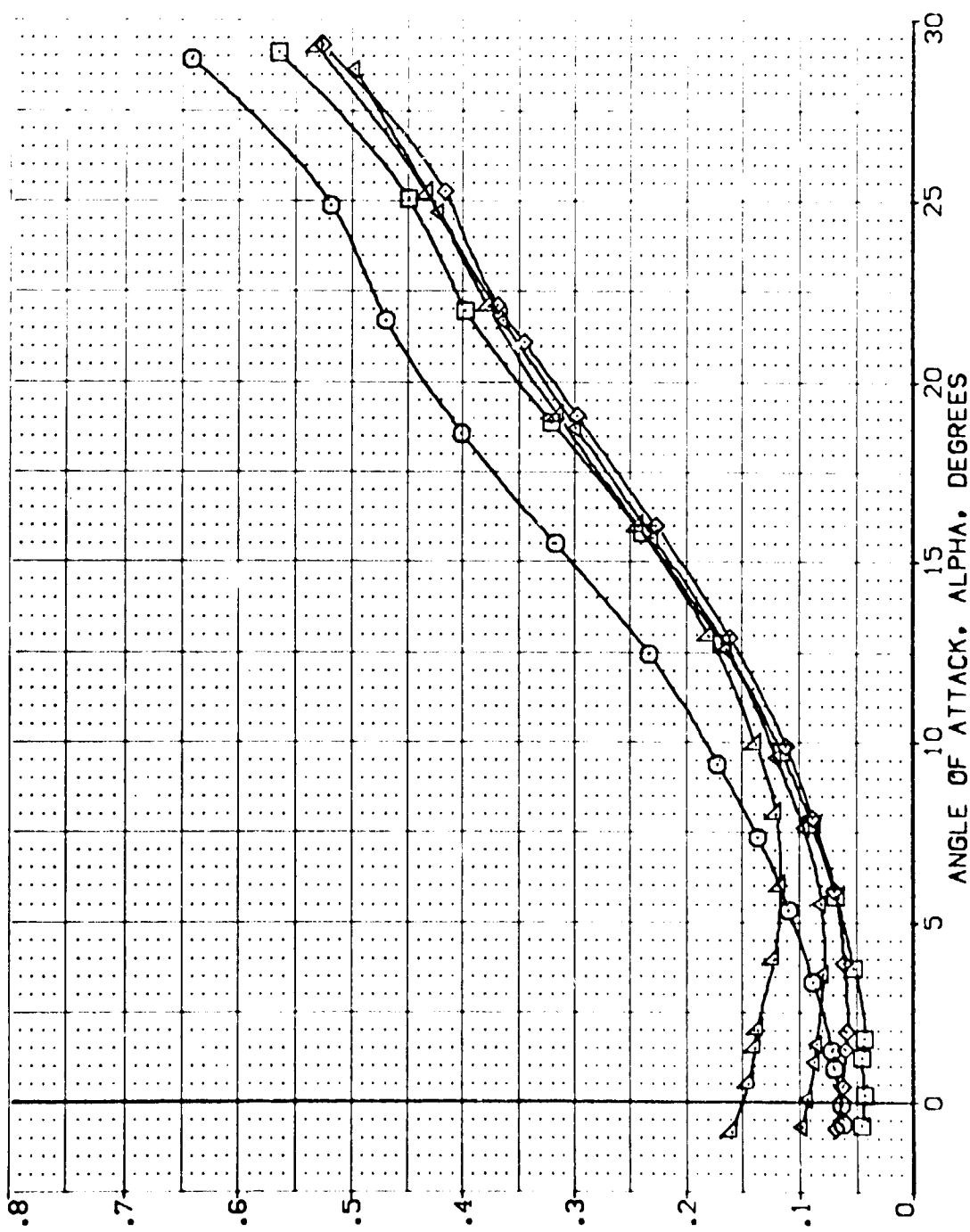
FIG. 7 ELEVON EFFECTS

(B)MAC = .80





DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	BOFLAP	SPOBRK	REFERENCE INFORMATION
[TEJ003]	ARC 11-747 CA53A B C M F VI	15.000	.000	-11.700	25.000	SREF 2.4210 SQ. FT.
[TEJ011]	ARC 11-747 CA53A B C M F VI	.000	.000	-11.700	25.000	LREF 14.2440 IN.
[TEJ002]	ARC 11-747 CA53A B C M F VI	-10.000	.000	-11.700	25.000	BREF 28.1004 IN.
[TEJ019]	ARC 11-747 CA53A B C M F VI	-20.000	.000	-11.700	25.000	XMRP 32.3010 IN.
[TEJ023]	ARC 11-747 CA53A B C M F VI	-40.000	.000	-11.700	25.000	YMRP 0.0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300



FOREBODY DRAG COEFFICIENT, CDF

FIG. 7 ELEVON EFFECTS

(C)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	BDLAP	SPDBRK	REFERENCE INFORMATION
[TEJ003]	ARC 11-747 DA53A B C M F V	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[TEJ011]	ARC 11-747 DA53A B C M F V	.000	.000	-11.700	25.000	LREF 14.2440
[TEJ002]	ARC 11-747 DA53A B C M F V	-10.000	.000	-11.700	25.000	BREF 28.1004
[TEJ019]	ARC 11-747 DA53A B C M F V	-20.000	.000	-11.700	25.000	VMRP 32.3010
[TEJ023]	ARC 11-747 DA53A B C M F V	-40.000	.000	-11.700	25.000	VMRP .0000
						ZMRP 11.2500
						SCALE .0300

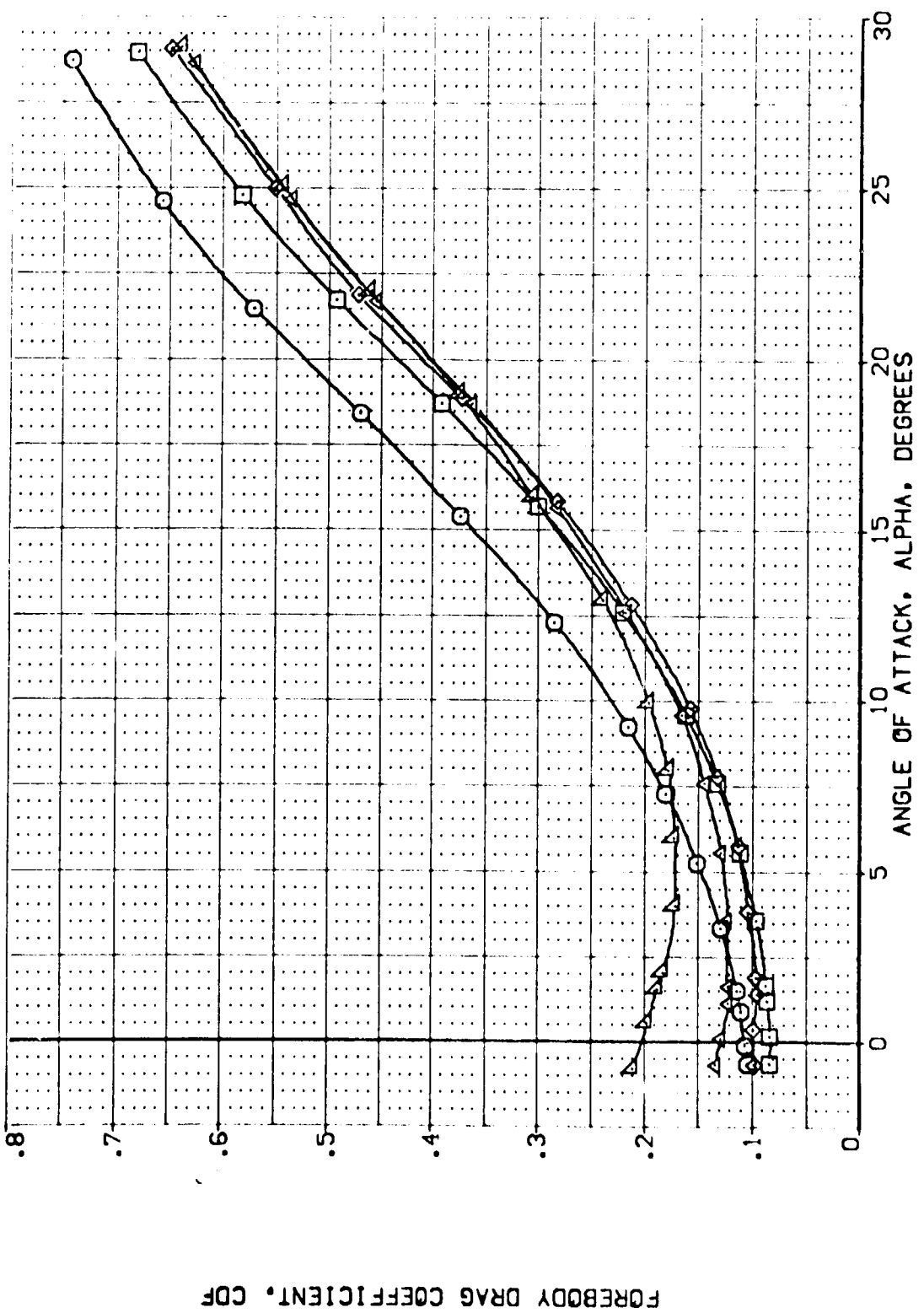


FIG. 7 ELEVON EFFECTS

(D)MACH = 1.05



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPDRBK	REFERENCE INFORMATION
[1EJ003]	ARC 11-747 DA53A B C M F VI V	15.000	.000	-11.700	25.000	SREF 2.4210 50.000
[1EJ011]	ARC 11-747 DA53A B C M F VI V	.000	.000	-11.700	25.000	LREF 14.2440 IN.
[1EJ002]	ARC 11-747 DA53A B C M F VI V	-10.000	.000	-11.700	25.000	BREF 28.1004 IN.
[1EJ019]	ARC 11-747 DA53A B C M F VI V	-20.000	.000	-11.700	25.000	XMRP 32.3010 IN.
[1EJ023]	ARC 11-747 DA53A B C M F VI V	-40.000	.000	-11.700	25.000	YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

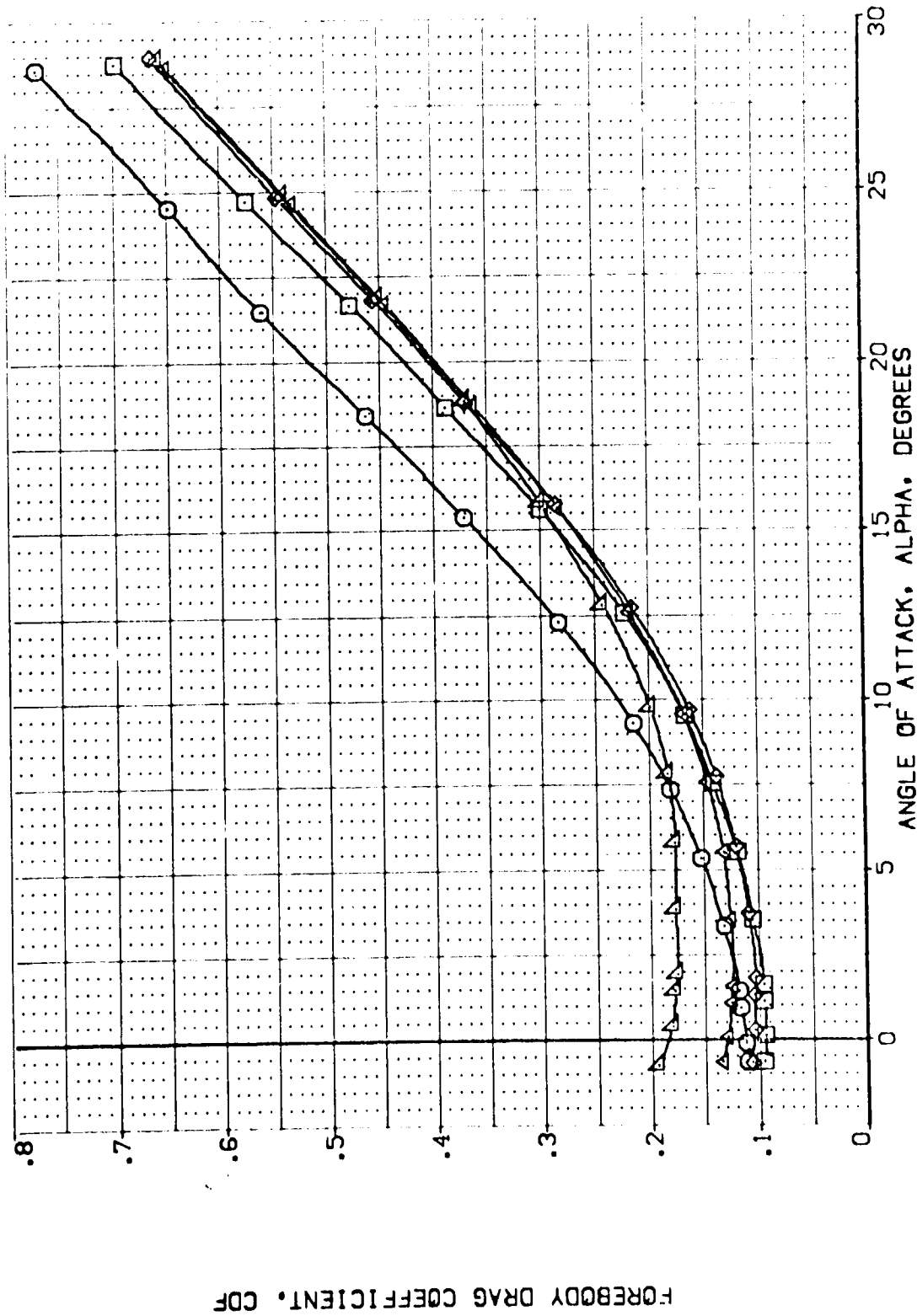


FIG. 7 ELEVON EFFECTS

(CJ)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPDRBK	REFERENCE INFORMATION
(TEJ003)	ARC 11-747 OAS3A B C M F VI V	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(TEJ011)	ARC 11-747 OAS3A B C M F VI V	.000	.000	-11.700	25.000	LREF 14.2440 IN.
(TEJ002)	ARC 11-747 OAS3A B C M F VI V	-10.000	.000	-11.700	25.000	BREF 28.1004 IN.
(TEJ019)	ARC 11-747 OAS3A B C M F VI V	-20.000	.000	-11.700	25.000	XMRP 32.3010 IN.
(TEJ023)	ARC 11-747 OAS3A B C M F VI V	-40.000	.000	-11.700	25.000	YMRP 11.2500 IN.
						SCALE .0300

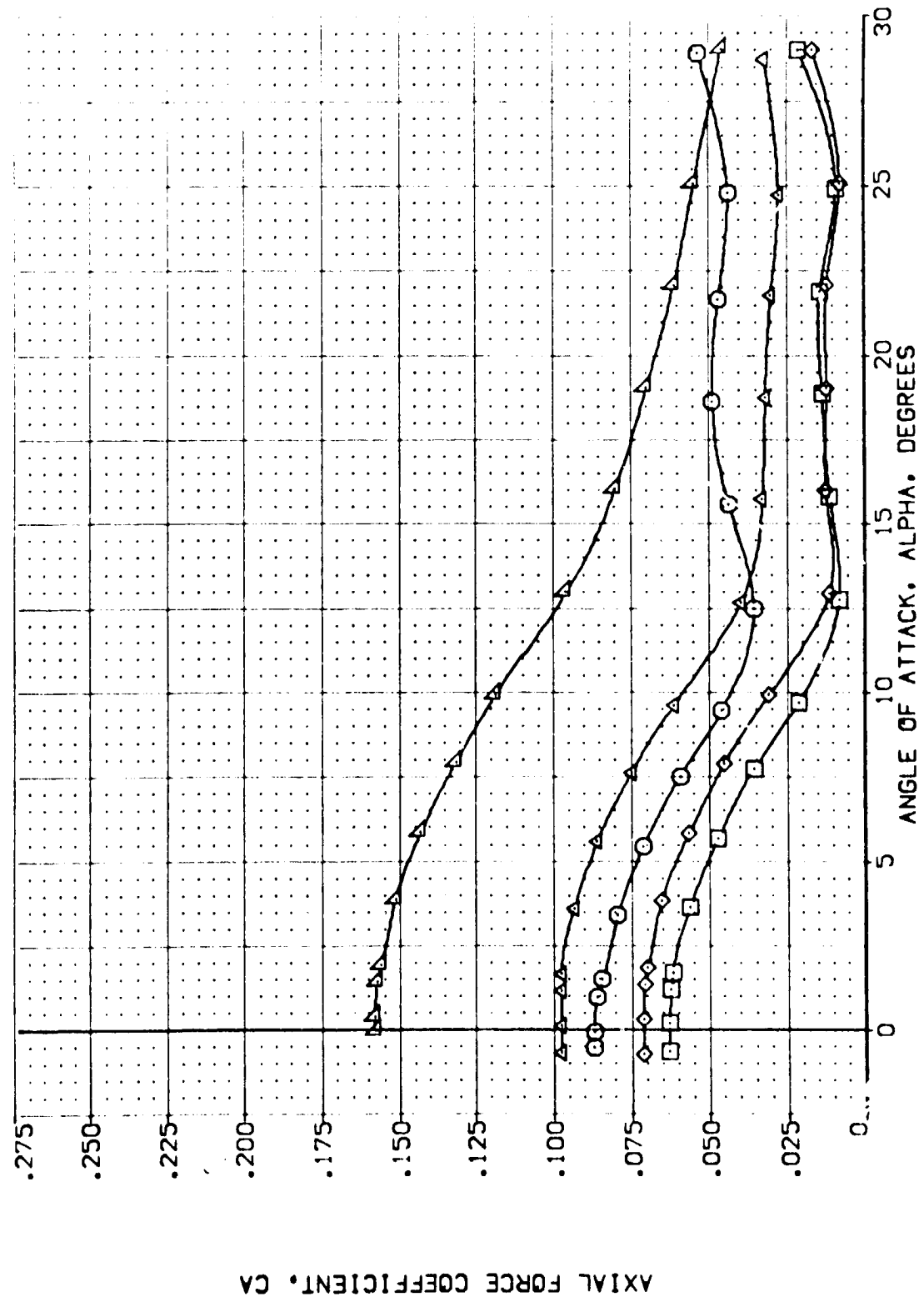


FIG. 7 ELEVON EFFECTS  
(A)MACH = .60



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BDF LAP	SPDBRK	REFERENCE INFORMATION
[TEJ003]	ARC 11-747 DAS3A B C H F VI V	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[TEJ011]	ARC 11-747 DAS3A B C H F VI V	.000	.000	-11.700	25.000	LREF 14.2440
[TEJ002]	ARC 11-747 DAS3A B C H F VI V	-10.000	.000	-11.700	25.000	BREF 28.1004
[TEJ019]	ARC 11-747 DAS3A B C H F VI V	-20.000	.000	-11.700	25.000	XMRP 32.3010
[TEJ023]	ARC 11-747 DAS3A B C H F VI V	-40.000	.000	-11.700	25.000	YMRP .0000
						ZMRP 11.2500
						SCALE .0300

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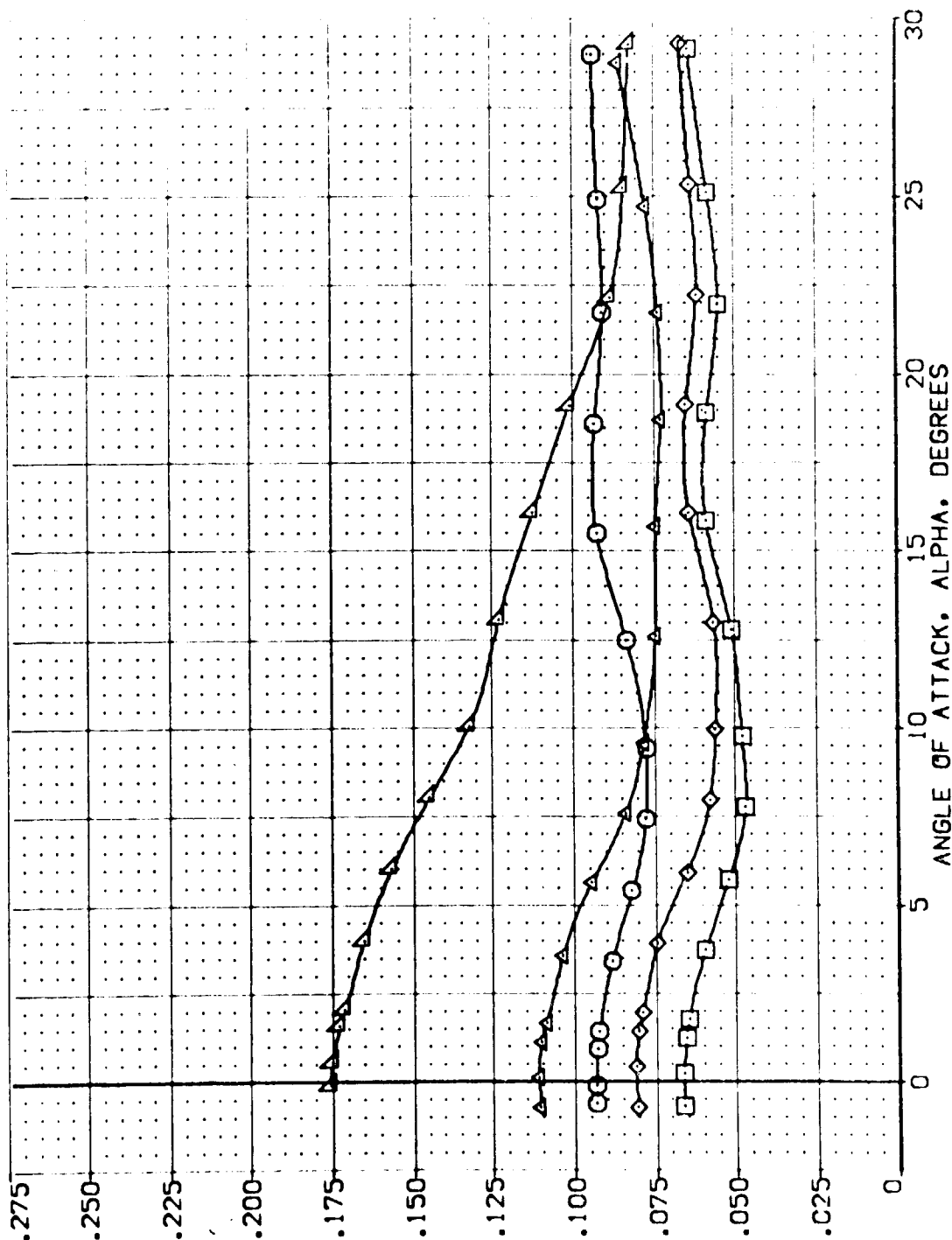


FIG. 7 ELEVON EFFECTS

(B) MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPOBRK	REFERENCE INFORMATION
(TEJ003)	ARC 11-747 DA53A B C M F V I V	15.000	.000	-11.700	25.000	SREF 2.4210 50. FT.
(TEJ011)	ARC 11-747 DA53A B C M F V I V	.000	.000	-11.700	25.000	LREF 14.2140 IN.
(TEJ002)	ARC 11-747 DA53A B C M F V I V	-10.000	.000	-11.700	25.000	BREF 28.1004 IN.
(TEJ019)	ARC 11-747 DA53A B C M F V I V	-20.000	.000	-11.700	25.000	YMRP 32.3010 IN.
(TEJ023)	ARC 11-747 DA53A B C M F V I V	-40.000	.000	-11.700	25.000	ZMRP 11.2500 IN.
						SCALE .0300

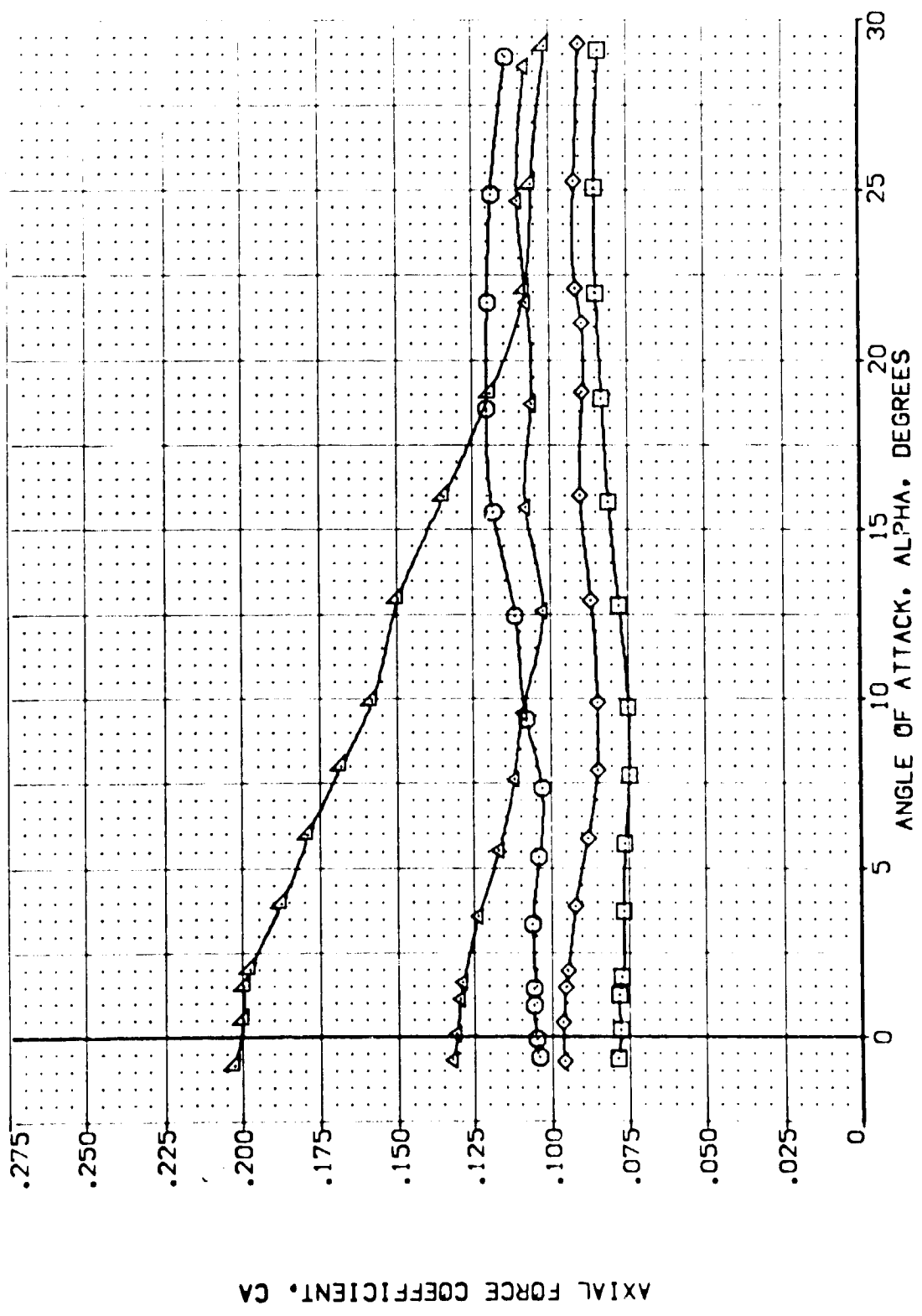


FIG. 7 ELEVON EFFECTS

(C)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPOILERK	REFERENCE INFORMATION
[TEJ003]	ARC 11-747 DA53A B C M F V I	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[TEJ011]	ARC 11-747 DA53A B C M F V I	.000	.000	-11.700	25.000	LREF 14.2440 IN.
[TEJ002]	ARC 11-747 DA53A B C M F V I	-10.000	.000	-11.700	25.000	BREF 28.1004 IN.
[TEJ019]	ARC 11-747 DA53A B C M F V I	-20.000	.000	-11.700	25.000	XREF 32.0010 IN.
[TEJ023]	ARC 11-747 DA53A B C M F V I	-40.000	.000	-11.700	25.000	YREF 11.2500 IN.
						ZREF 11.0300 IN.
						SCALE

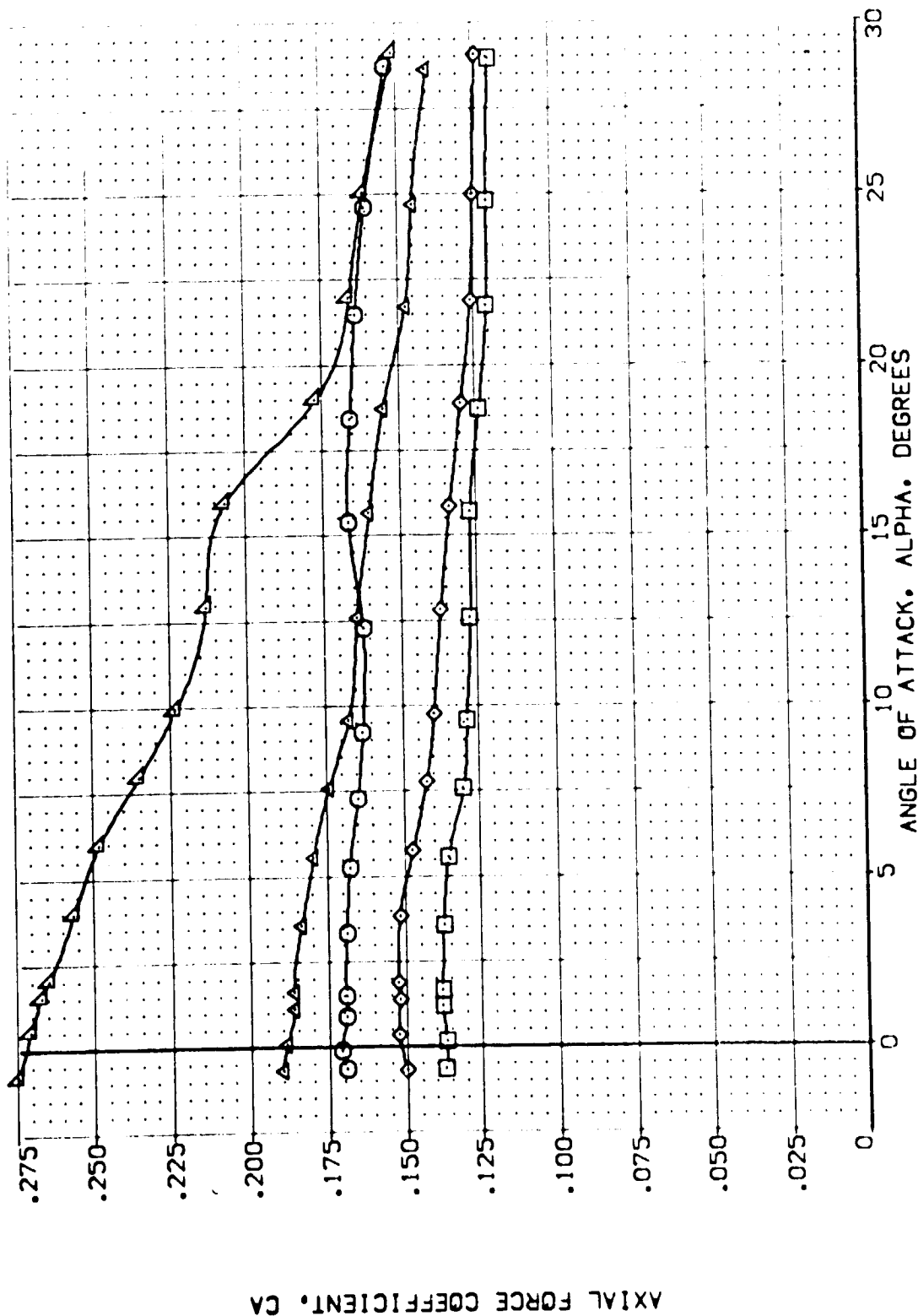


FIG. 7 ELEVON EFFECTS

(O)MACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	BOFLAP	SPDBRK	REFERENCE INFORMATION
(TE4003)	ARC 11-747 D453A B C M F VI V	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(TE4011)	ARC 11-747 D453A B C M F VI V	.000	.000	-11.700	25.000	LREF 14.2440 IN.
(TE4002)	ARC 11-747 D453A B C M F VI V	-10.000	.000	-11.700	25.000	BREF 28.1004 IN.
(TE4019)	ARC 11-747 D453A B C M F VI V	-20.000	.000	-11.700	25.000	XMRP 32.3010 IN.
(TE4023)	ARC 11-747 D453A B C M F VI V	-40.000	.000	-11.700	25.000	YMRP 11.2500 IN.
						SCALE .0300

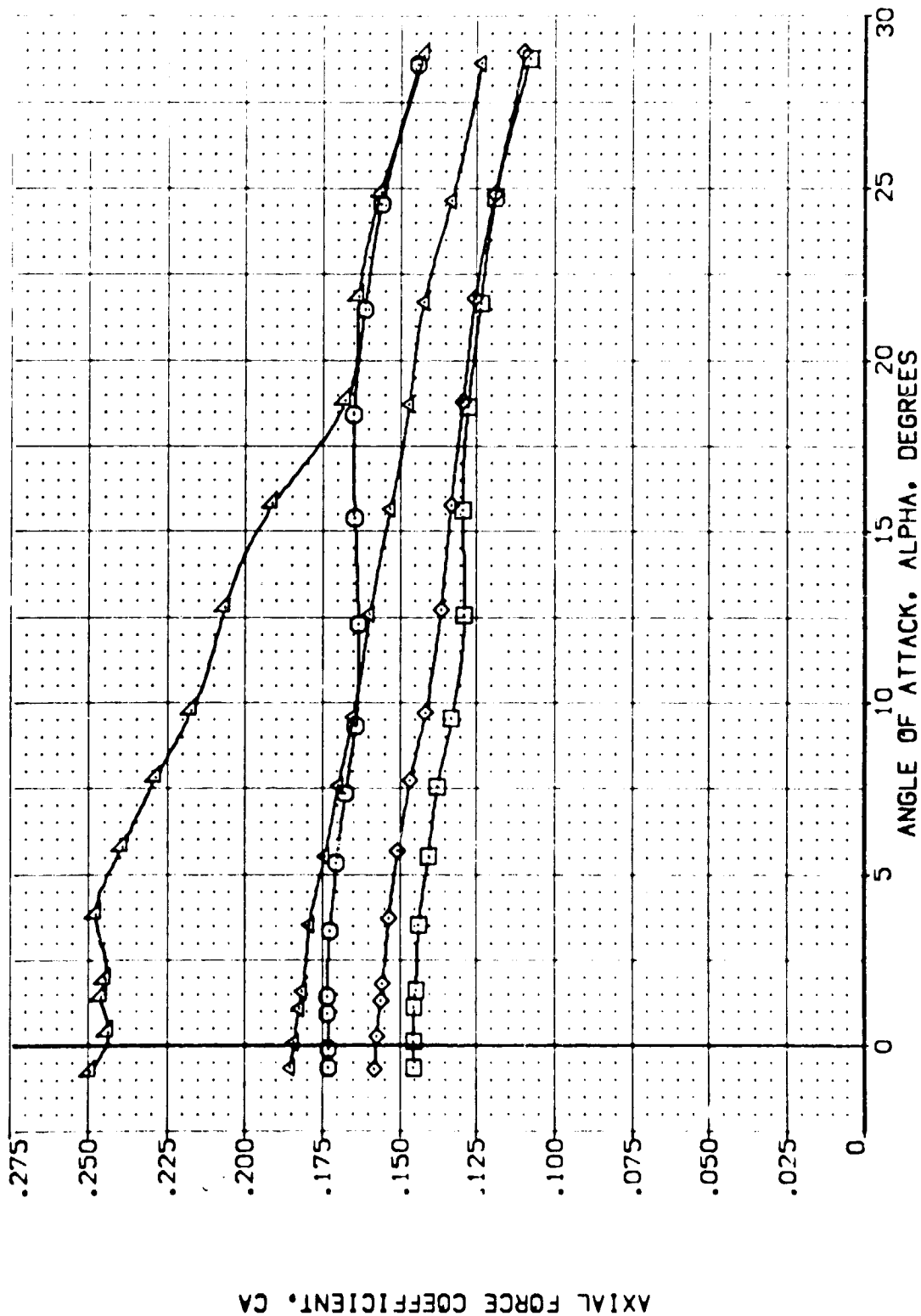


FIG. 7 ELEVON EFFECTS

(C)MACH = 1.20



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	ATLDRN	BOFLAP	SPDRBK	REFERENCE INFORMATION
[TEJ003]	ARC 11-747 D453A B C M F VI V	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[TEJ011]	ARC 11-747 D453A B C M F VI V	.000	.000	-11.700	25.000	LREF 14.2440 IN.
[TEJ002]	ARC 11-747 D453A B C M F VI V	-10.000	.000	-11.700	25.000	BREF 28.1004 IN.
[TEJ019]	ARC 11-747 D453A B C M F VI V	-20.000	.000	-11.700	25.000	XMRP 32.3010 IN.
[TEJ023]	ARC 11-747 D453A B C M F VI V	-40.000	.000	-11.700	25.000	YMRP 11.2500 IN.
						SCALE

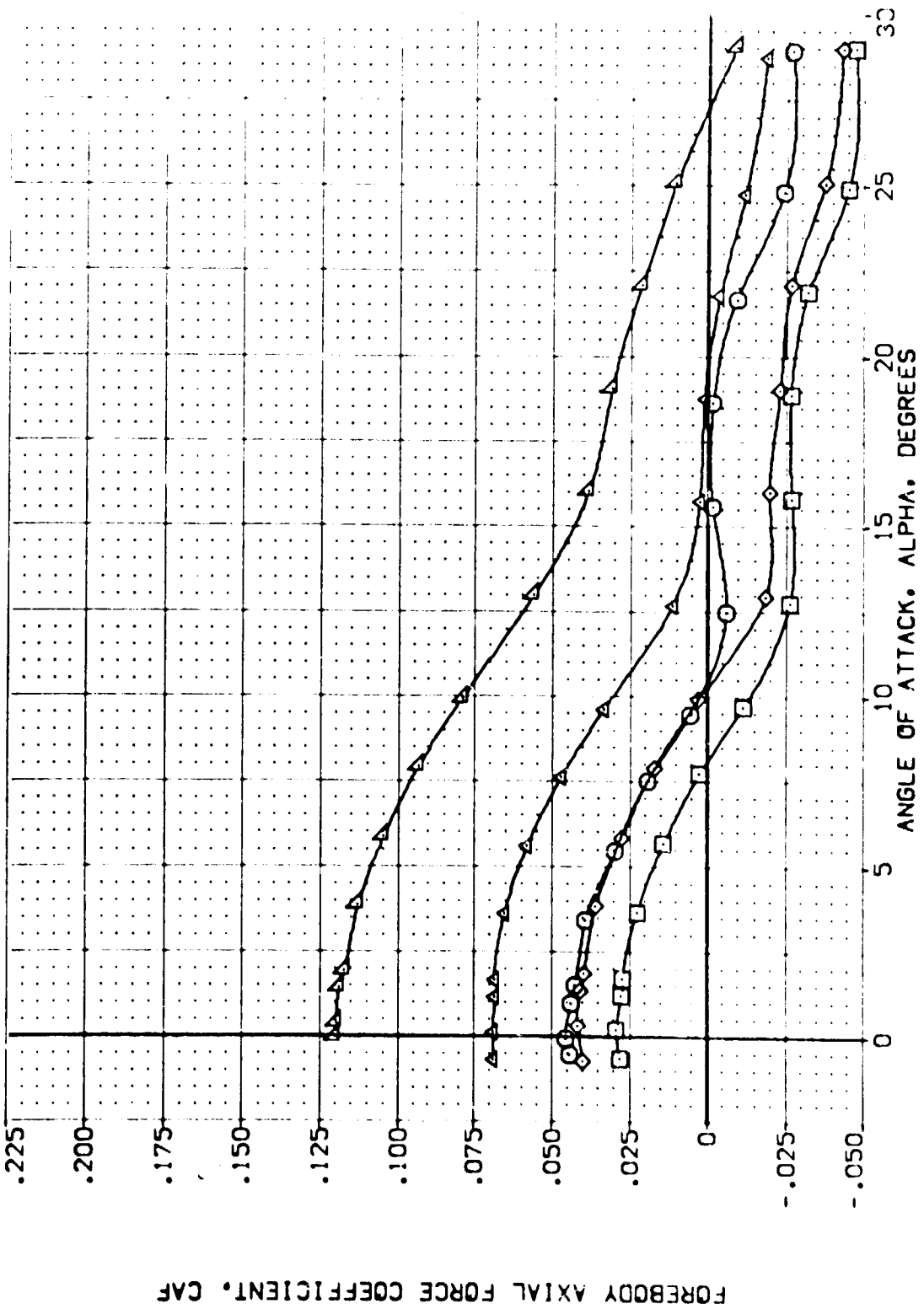


FIG. 7 ELEVON EFFECTS

(A) MACH = .60

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BDFLAP	SPD BRK	REFERENCE INFORMATION
(TEJ003)	□	ARC 11-747 B A53A B C M F V1 V	15.000	.000	-11.700	25.000	SREF 2.4210 SQ. FT.
(TEJ011)	○	ARC 11-747 B A53A B C M F V1 V	.000	.000	-11.700	25.000	LREF 14.244C IN.
(TEJ002)	△	ARC 11-747 B A53A B C M F V1 V	-10.000	.000	-11.700	25.000	BREF 28.100A IN.
(TEJ019)	◇	ARC 11-747 B A53A B C M F V1 V	-20.000	.000	-11.700	25.000	XMRP 32.3010 IN.
(TEJ023)	×	ARC 11-747 B A53A B C M F V1 V	-40.000	.000	-11.700	25.000	YMRP .0000 IN.
							ZMRP 11.2500 IN.
							SCALE .0300

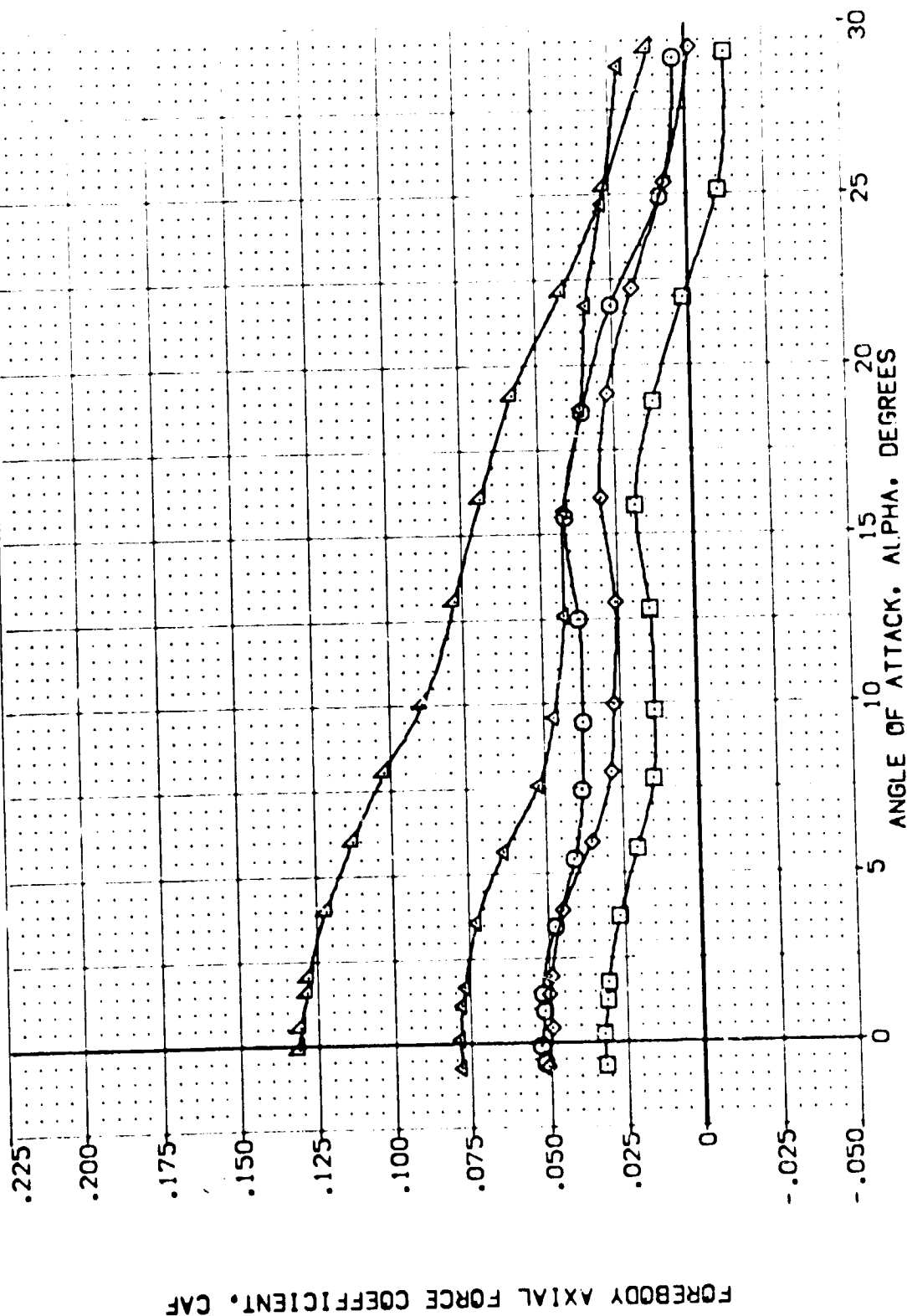


FIG. 7 ELEVON EFFECTS

(B) MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPDRK	REFERENCE INFORMATION
[TEJ003]	ARC 11-747 OAS3A B C M F VI V	15.000	.000	-11.700	25.000	SREF 2.4213 SQ.FT.
[TEJ011]	ARC 11-747 OAS3A B C M F VI V	.000	.000	-11.700	25.000	LREF 14.2143
[TEJ022]	ARC 11-747 OAS3A B C M F VI V	-10.000	.000	-11.700	25.000	BREF 28.0004
[TEJ019]	ARC 11-747 OAS3A B C M F VI V	-20.000	.000	-11.700	25.000	XMRP 32.3013
[TEJ023]	ARC 11-747 OAS3A B C M F VI V	-40.000	.000	-11.700	25.000	YMRP .0000
						ZMRP 11.2500
						SCALE .0300

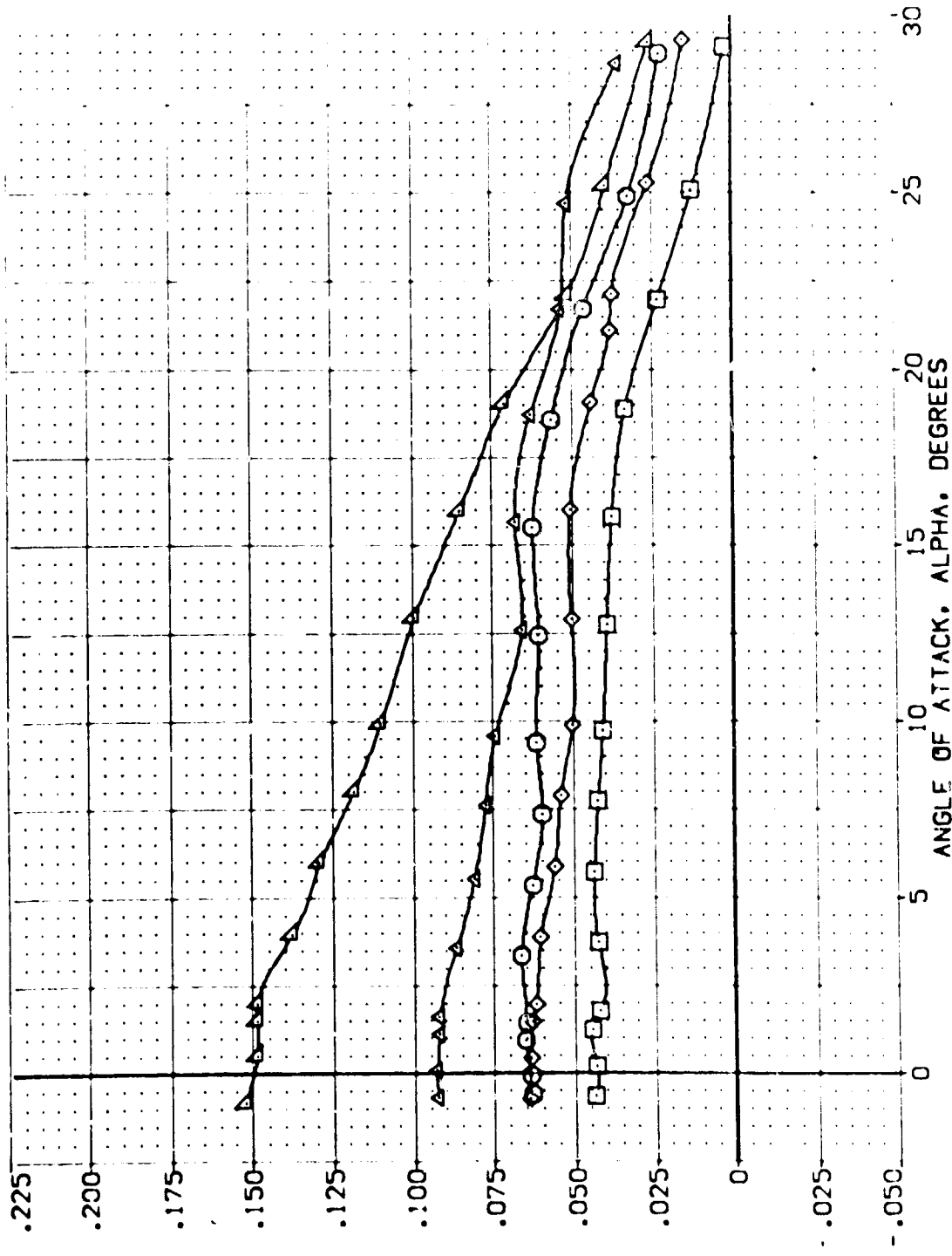


FIG. 7 ELEVON EFFECTS

(C)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NON	RV/L	ELEVON	AILRON	80FLAP	SPOBRK	REFERENCE INFORMATION
(TEJ003)	ARC 11-747 BA53A B C M F VI	V	RV/L	15.000	.000	-11.700	25.000	S REF 0.0210
(TEJ011)	ARC 11-747 BA53A B C M F VI	V	RV/L	10.000	.000	-11.700	25.000	L REF 14.2440
(TEJ002)	ARC 11-747 BA53A B C M F VI	V	RV/L	-10.000	.000	-11.700	25.000	U REF 20.1004
(TEJ019)	ARC 11-747 BA53A B C M F VI	V	RV/L	-20.000	.000	-11.700	25.000	X REF 32.3010
(TEJ023)	ARC 11-747 BA53A B C M F VI	V	RV/L	-40.000	.000	-11.700	25.000	Y REF 11.2500
								Z REF 11.2500
								SCALE .0300

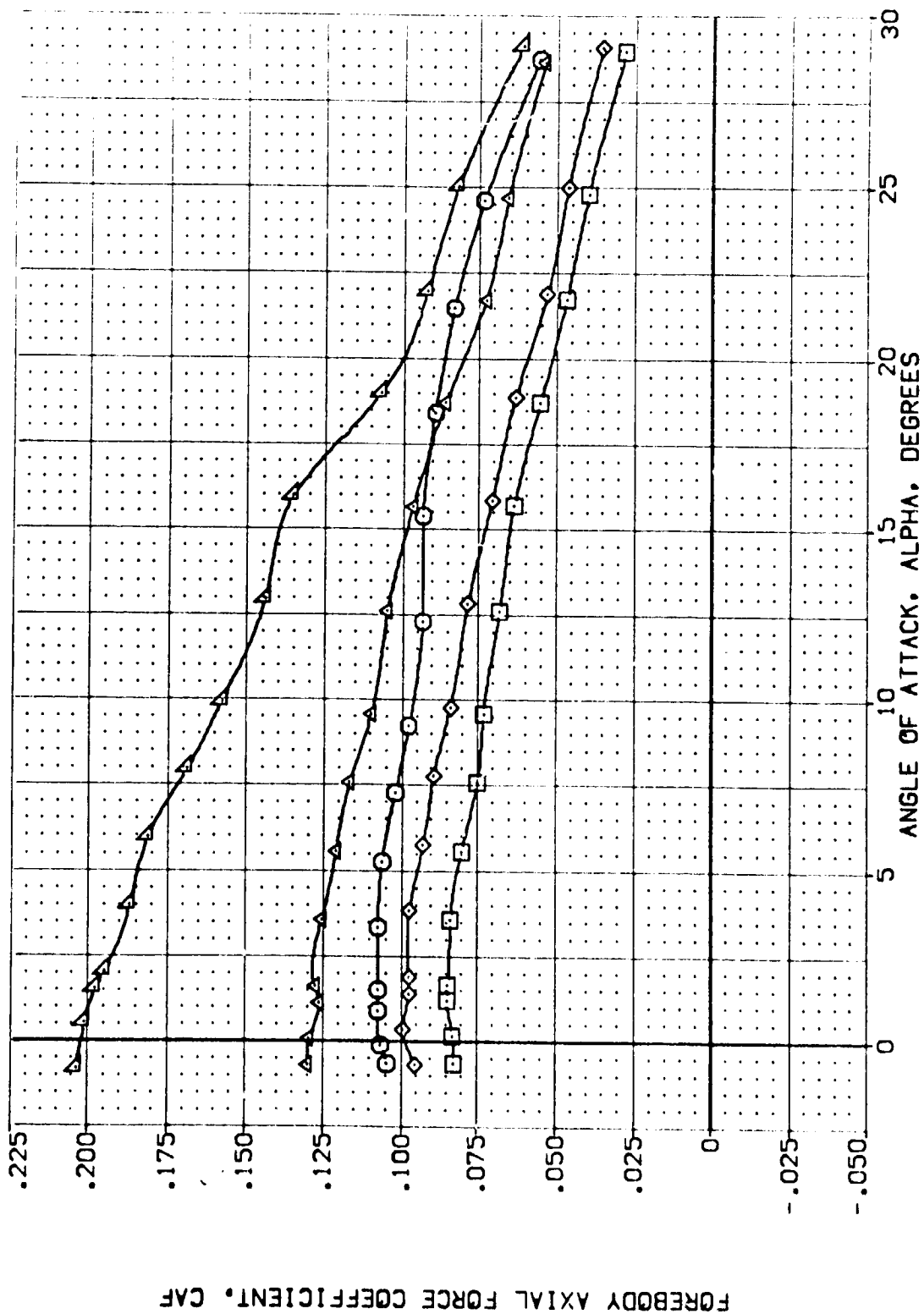


FIG. 7 ELEVON EFFECTS

(D)MACH = 1.05



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPDRBK	REFERENCE INFORMATION
[TEJ003]	ARC 11-747 DA53A B C M F VI V	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[TEJ011]	ARC 11-747 DA53A B C M F VI V	.000	.000	-11.700	25.000	LREF 14.2440 IN.
[TEJ022]	ARC 11-747 DA53A B C M F VI V	-10.000	.000	-11.700	25.000	BREF 28.1004 IN.
[TEJ019]	ARC 11-747 DA53A B C M F VI V	-20.000	.000	-11.700	25.000	XMRP 32.3010 IN.
[TEJ023]	ARC 11-747 DA53A B C M F VI V	-40.000	.000	-11.700	25.000	YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300 IN.

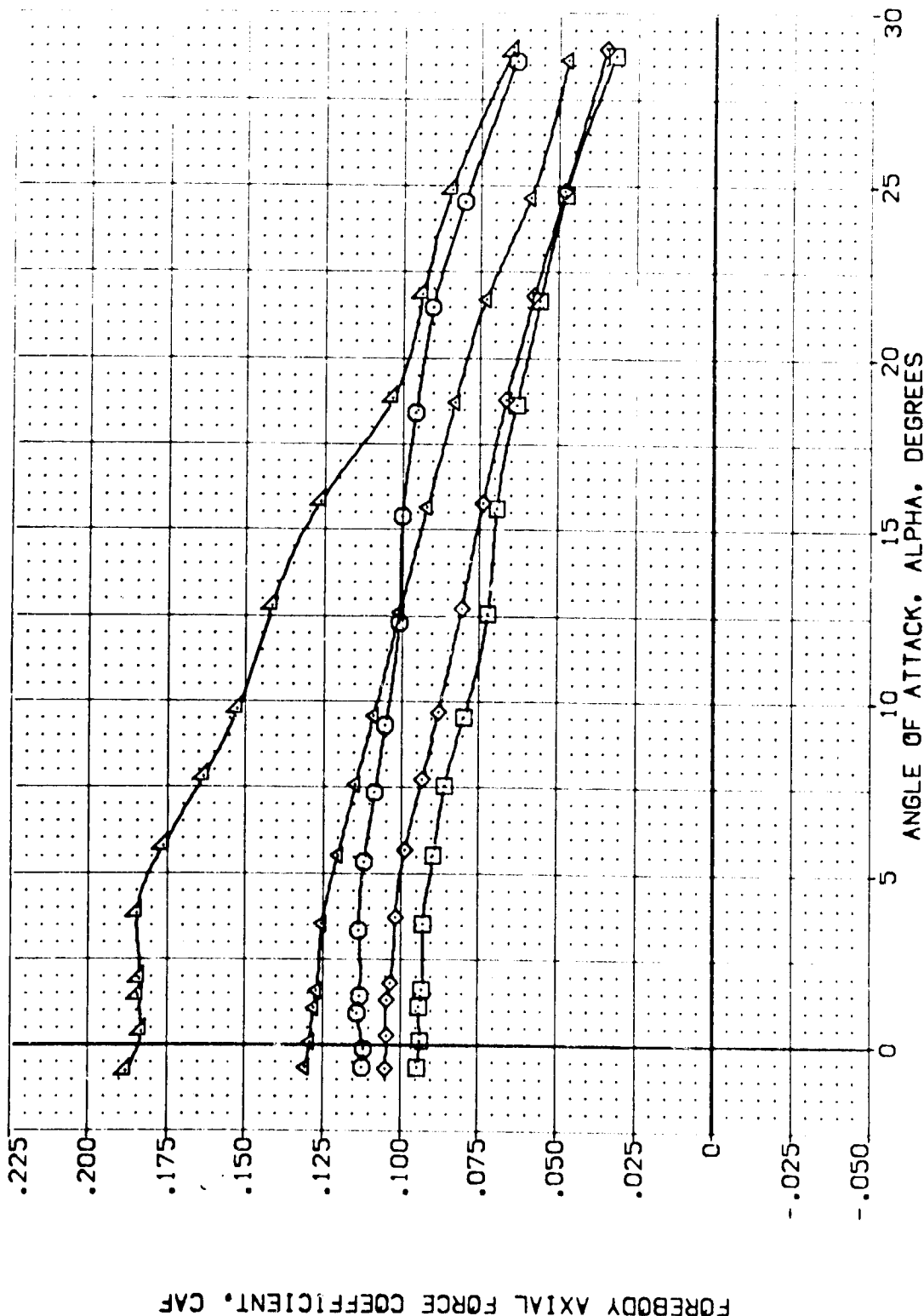


FIG. 7 ELEVON EFFECTS

(E)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NOT	RV/L	ELEVON	AIRLON	BOFLAP	SPOBRK	REFERENCE INFORMATION
(TEJ003)	ARC 11-747 GAS3A B C M F VI	V	RV/L	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(TEJ011)	ARC 11-747 GAS3A B C M F VI	V	RV/L	10.000	.000	-11.700	25.000	LREF 14.2440 IN.
(TEJ002)	ARC 11-747 GAS3A B C M F VI	V	RV/L	-10.000	.000	-11.700	25.000	BREF 28.1004 IN.
(TEJ019)	ARC 11-747 GAS3A B C M F VI	V	RV/L	-20.000	.000	-11.700	25.000	XMRP 32.3010 IN.
(TEJ023)	ARC 11-747 GAS3A B C M F VI	V	RV/L	-40.000	.000	-11.700	25.000	ZMRP 11.2500 IN.
								SCALE .0300

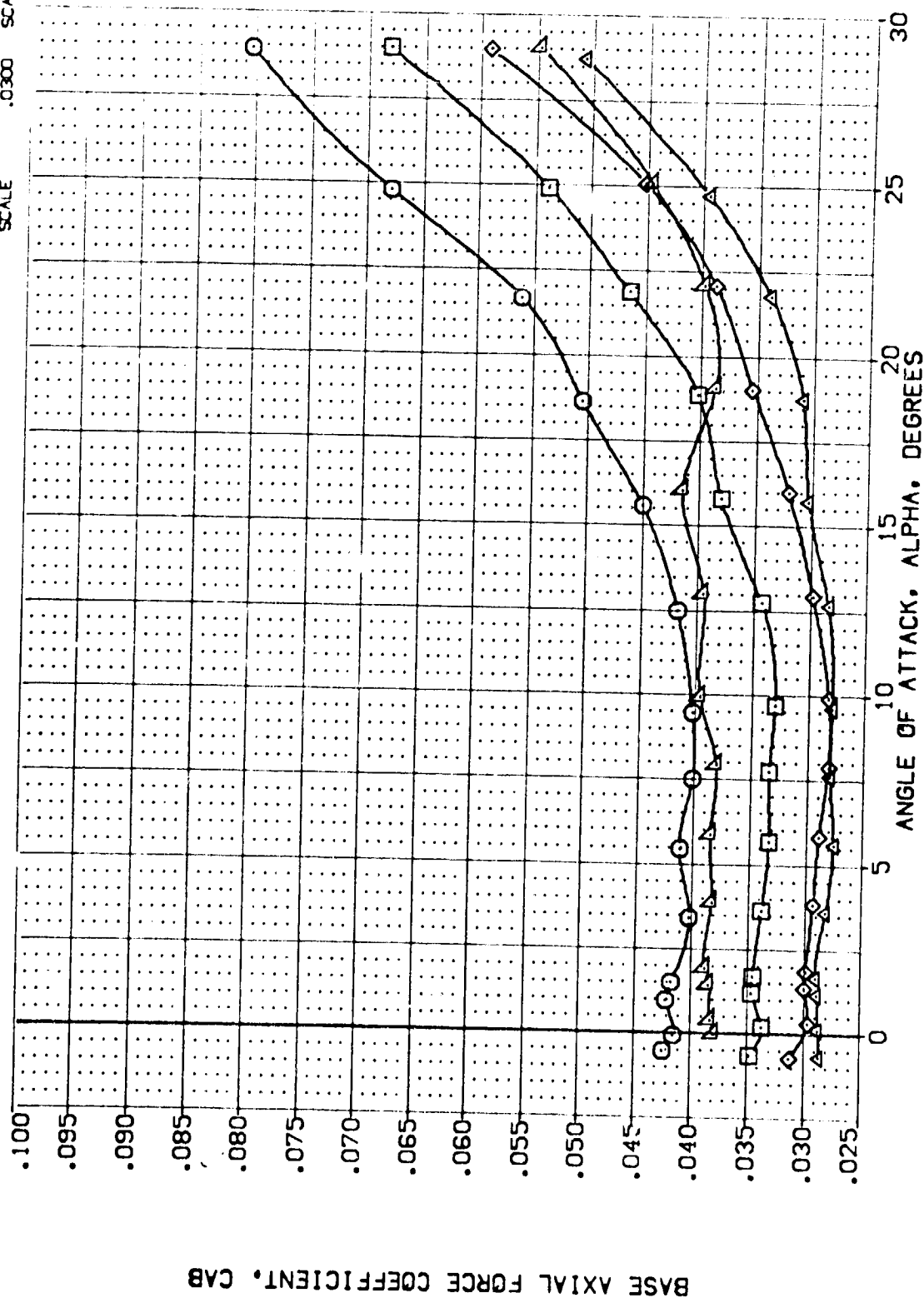


FIG. 7 ELEVON EFFECTS

(A)MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPDRBK	REFERENCE INFORMATION
(TEJ003)	ARC 11-747 DA53A B C M F VI V	15.000	.000	-11.700	25.000	SREF 2.4210 50. FT.
(TEJ011)	ARC 11-747 DA53A B C M F VI V	15.000	.000	-11.700	25.000	LREF 14.2440 IN.
(TEJ002)	ARC 11-747 DA53A B C M F VI V	-10.000	.000	-11.700	25.000	BREF 28.1004 IN.
(TEJ019)	ARC 11-747 DA53A B C M F VI V	-20.000	.000	-11.700	25.000	XMRP 32.5010 IN.
(TEJ023)	ARC 11-747 DA53A B C M F VI V	-40.000	.000	-11.700	25.000	YMRP 11.0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

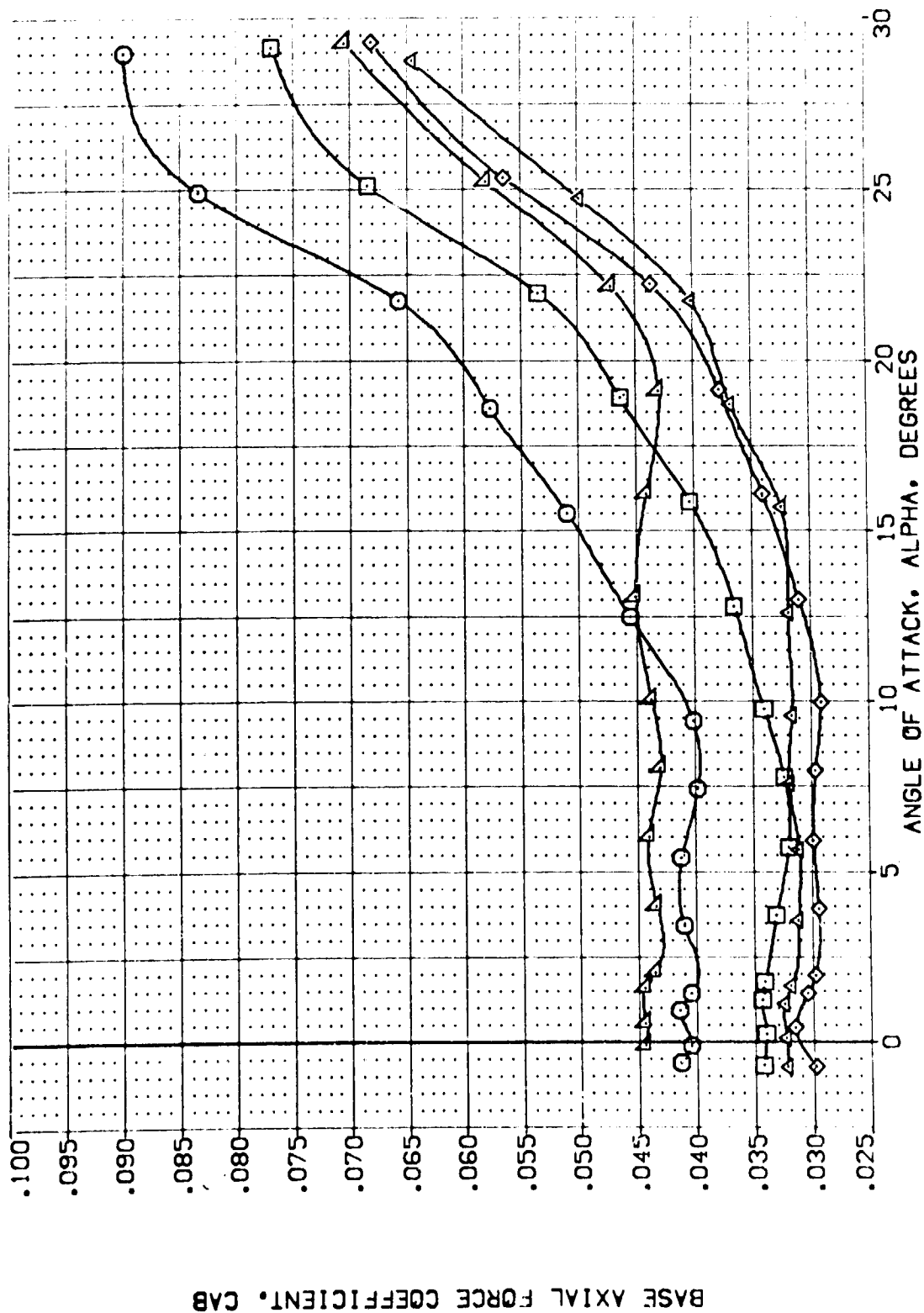


FIG. 7 ELEVON EFFECTS

(B)MACH = .80



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPOBRK	REFERENCE INFORMATION
[TEJ003]	ARC 11-747 DA53A B C M F VI V	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[TEJ011]	ARC 11-747 DA53A B C M F VI V	.000	.000	-11.700	25.000	LREF 14.2440 IN.
[TEJ002]	ARC 11-747 DA53A B C M F VI V	-10.000	.000	-11.700	25.000	BREF 28.1004 IN.
[TEJ019]	ARC 11-747 DA53A B C M F VI V	-20.000	.000	-11.700	25.000	YMRP 32.3010 IN.
[TEJ023]	ARC 11-747 DA53A B C M F VI V	-40.000	.000	-11.700	25.000	ZMRP 11.2300 IN.
						SCALE .0300

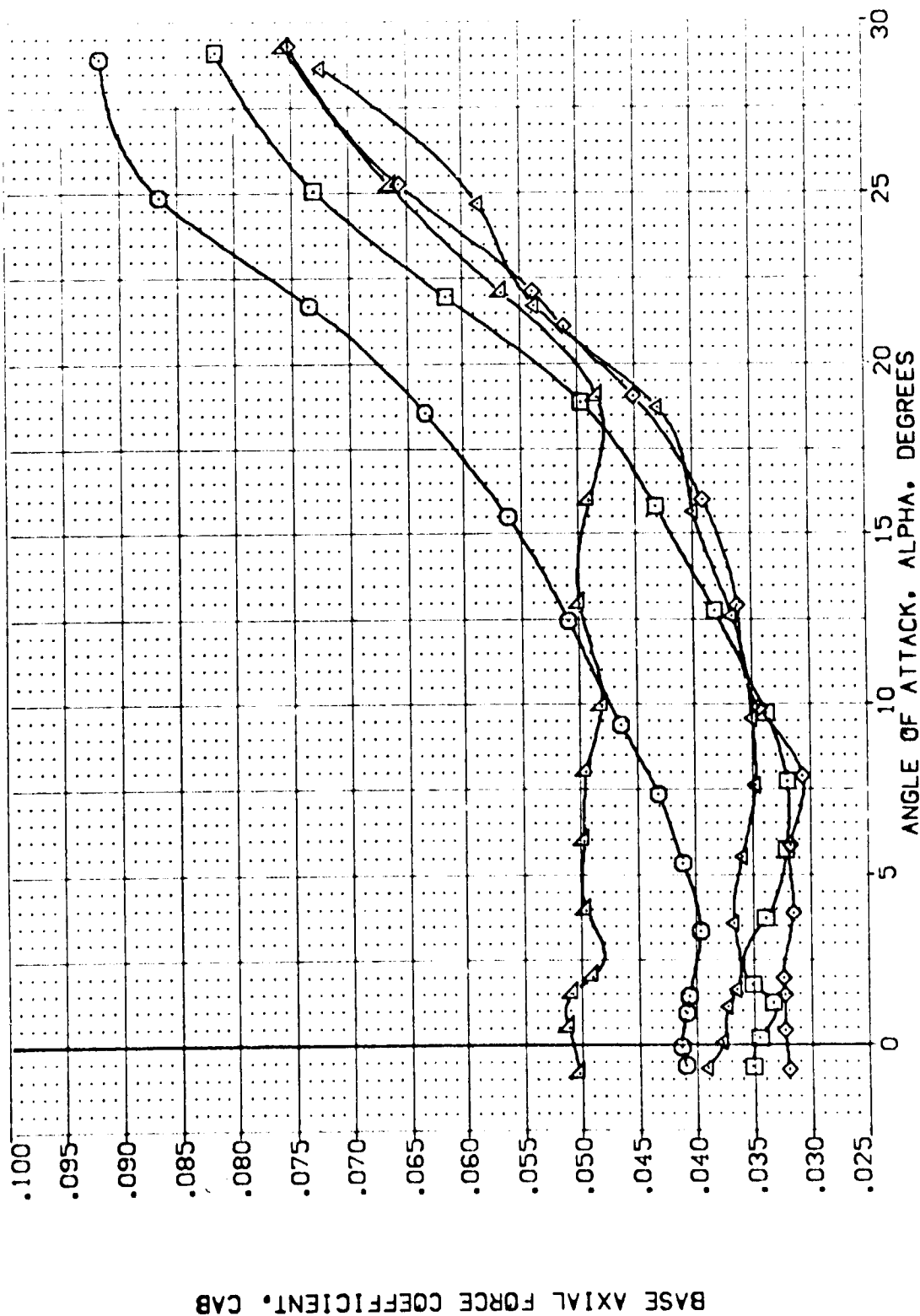


FIG. 7 ELEVON EFFECTS

(C)MACH = .90



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPDBRK	REFERENCE INFORMATION
(TEJ003)	ARC 11-747 DA53A B C M F VI V	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(TEJ011)	ARC 11-747 DA53A B C M F VI V	10.000	.000	-11.700	25.000	LREF 14.2410
(TEJ002)	ARC 11-747 DA53A B C M F VI V	-10.000	.000	-11.700	25.000	BREF 28.1004
(TEJ019)	ARC 11-747 DA53A B C M F VI V	-21.000	.000	-11.700	25.000	XMRP 32.3010
(TEJ023)	ARC 11-747 DA53A B C M F VI V	-41.000	.000	-11.700	25.000	ZMRP 11.2500
						SCALE .0300

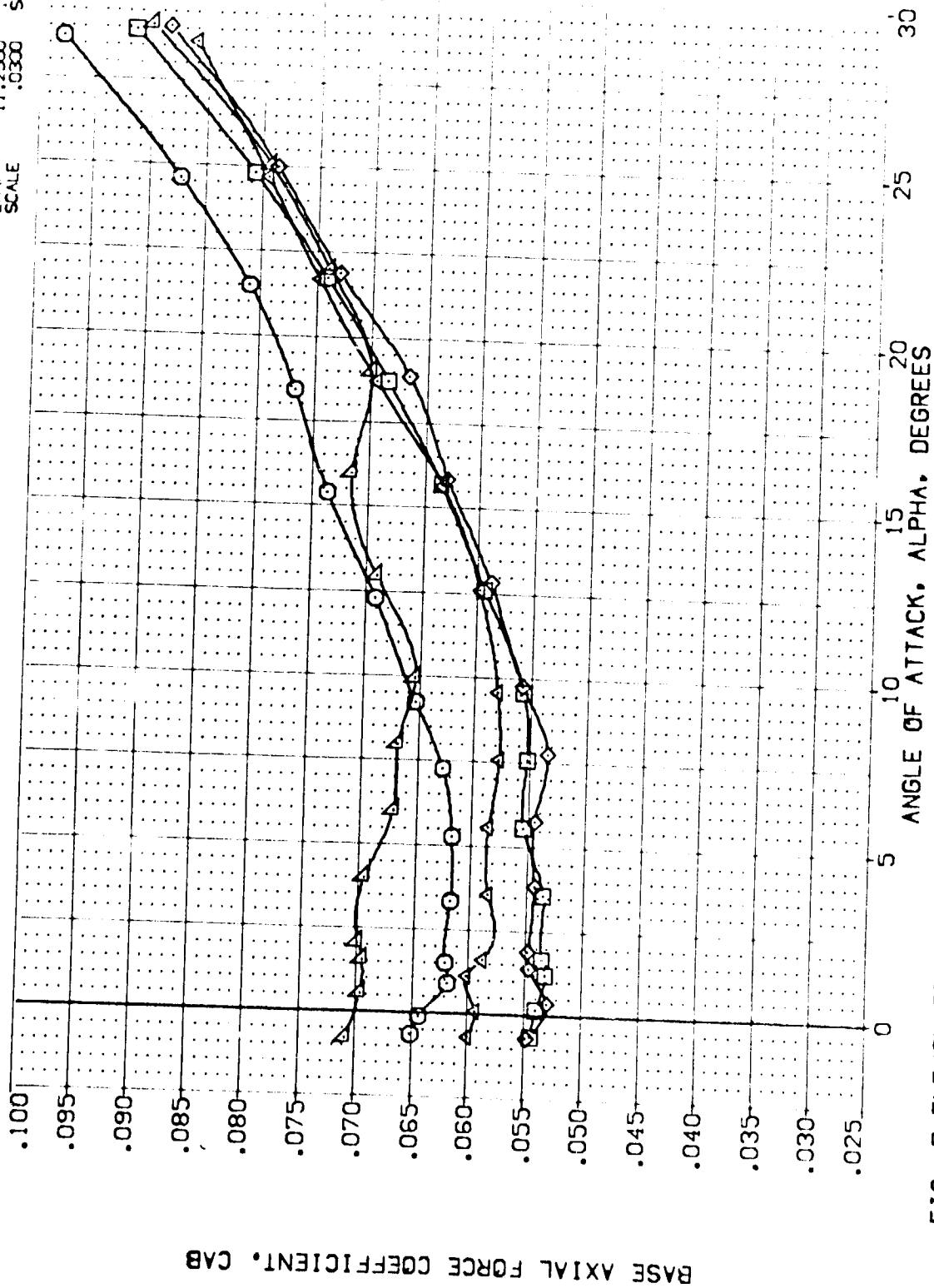


FIG. 7 ELEVON EFFECTS

(C)MACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPDRBK	REFERENCE INFORMATION
(TE4003)	ARC 11-747 DA53A B C M F V1	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(TE4011)	ARC 11-747 DA53A B C M F V1	.000	.000	-11.700	25.000	LREF 14.2440 IN.
(TE4002)	ARC 11-747 DA53A B C M F V1	-10.000	.000	-11.700	25.000	BREF 28.1004 IN.
(TE4019)	ARC 11-747 DA53A B C M F V1	-20.000	.000	-11.700	25.000	XMRP 32.3010 IN.
(TE4023)	ARC 11-747 DA53A B C M F V1	-40.000	.000	-11.700	25.000	YMRP 11.0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

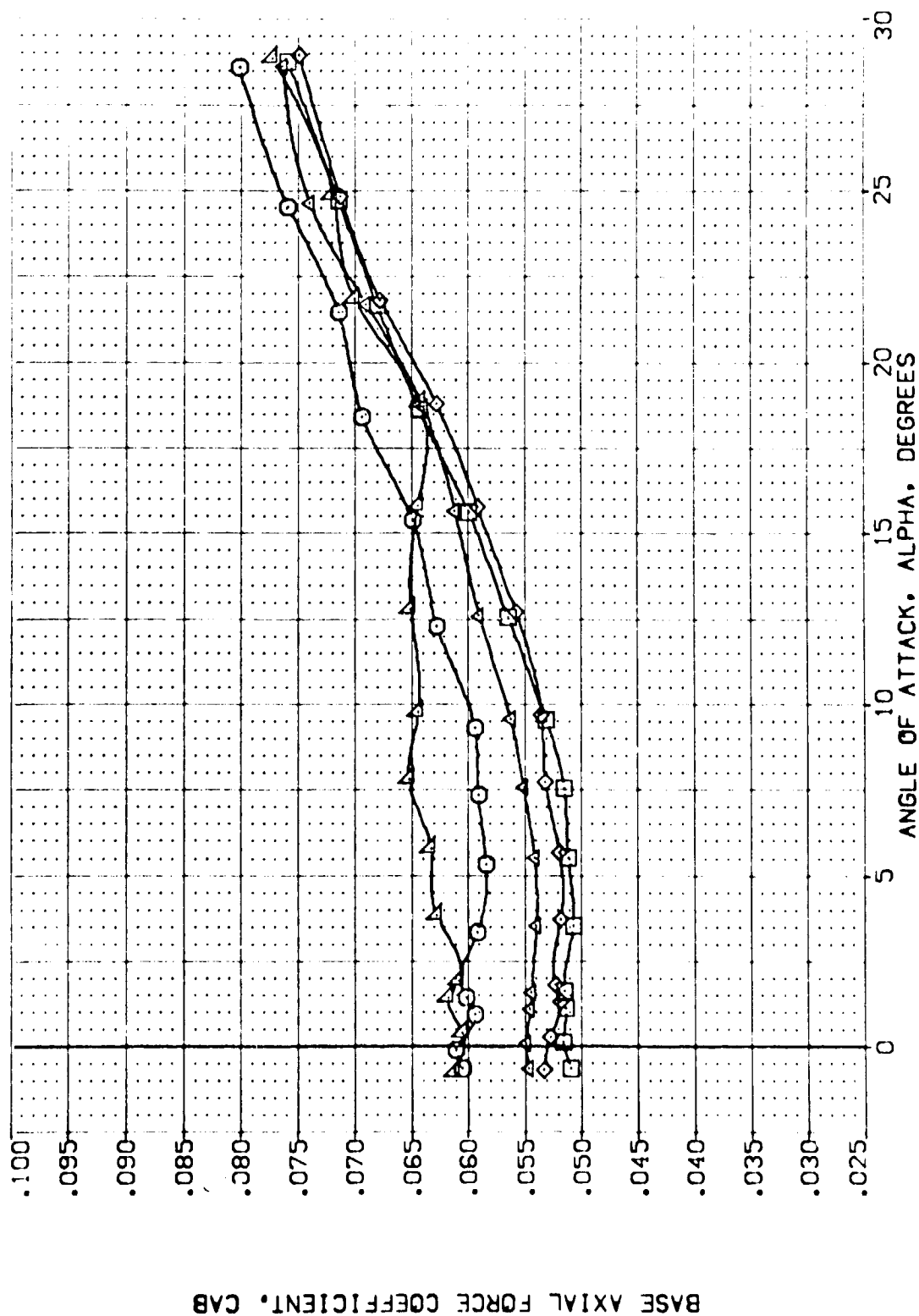


FIG. 7 ELEVON EFFECTS

(E)MACH = 1.20

DATA SET SYMBOL	CONF IGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPDRBK	REFERENCE INFORMATION
[TE4003]	ARC 11-747 DA53A B C M F VI V	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[TE4011]	ARC 11-747 DA53A B C M F VI V	.000	.000	-11.700	25.000	LREF 14.2440 IN.
[TE4022]	ARC 11-747 DA53A B C M F VI V	-10.000	.000	-11.700	25.000	BREF 28.1004 IN.
[TE4019]	ARC 11-747 DA53A B C M F VI V	-20.000	.000	-11.700	25.000	XMRD 32.3010 IN.
[TE4023]	ARC 11-747 DA53A B C M F VI V	-40.000	.000	-11.700	25.000	ZMRD 11.2500 IN.
						SCALE .0300

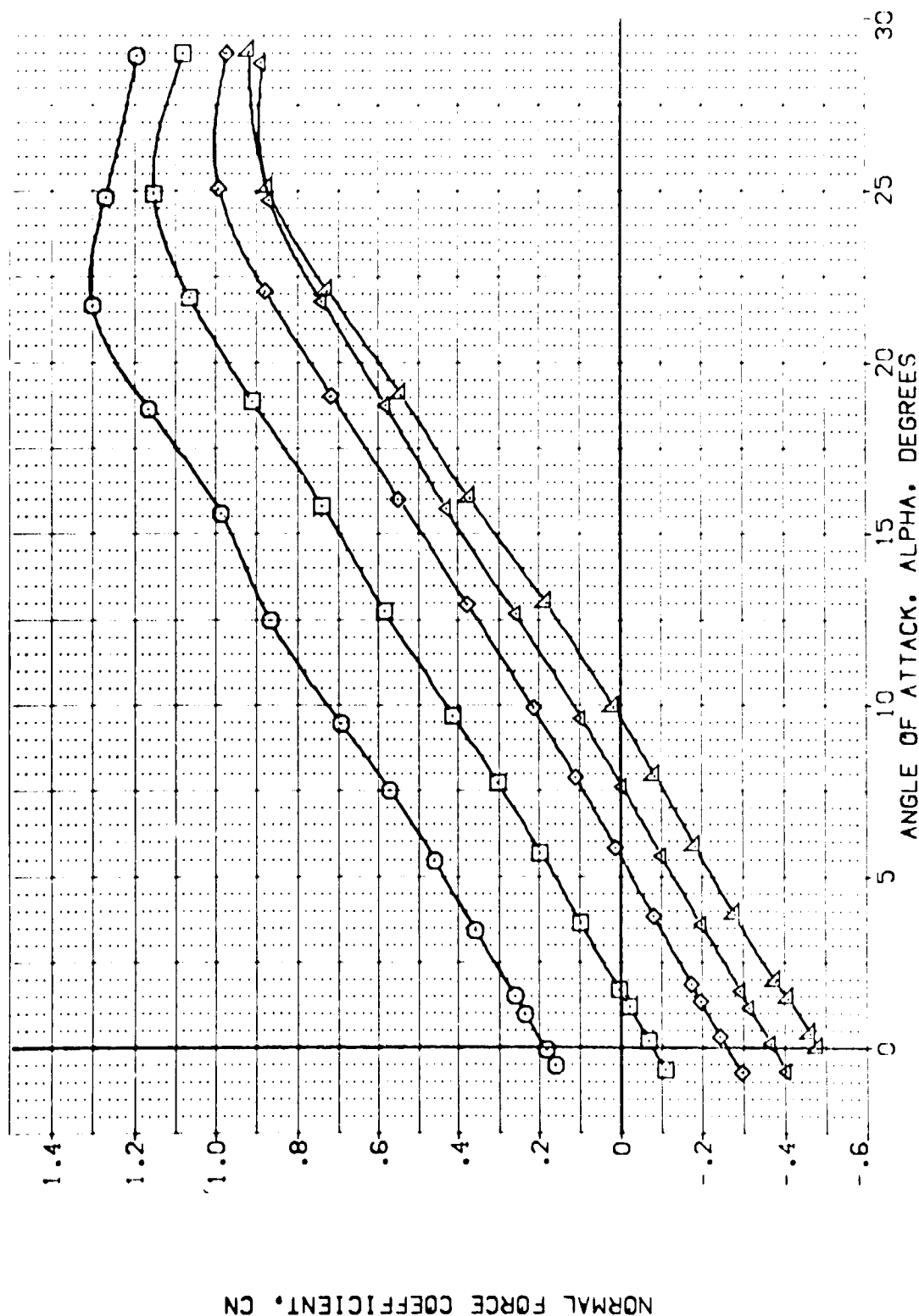


FIG. 7 ELEVON EFFECTS

(A)MACH = .60



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NO.	RV/L	ELEVON	AILERON	BOFLAP	SPDBRK	REFERENCE INFORMATION
(TEJ003)	ARC 11-747 DA53A B C M F V	V	NO.	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(TEJ011)	ARC 11-747 DA53A B C M F V	V	NO.	.000	.000	-11.700	25.000	LREF 14.2440
(TEJ002)	ARC 11-747 DA53A B C M F V	V	NO.	.000	.000	-11.700	25.000	BREF 28.1004
(TEJ019)	ARC 11-747 DA53A B C M F V	V	NO.	-10.000	.000	-11.700	25.000	XMRD 32.3010
(TEJ023)	ARC 11-747 DA53A B C M F V	V	NO.	-20.000	.000	-11.700	25.000	YMRD .0000
				-40.000	.000	-11.700	25.000	ZMRD 11.2500
								SCALE .0300

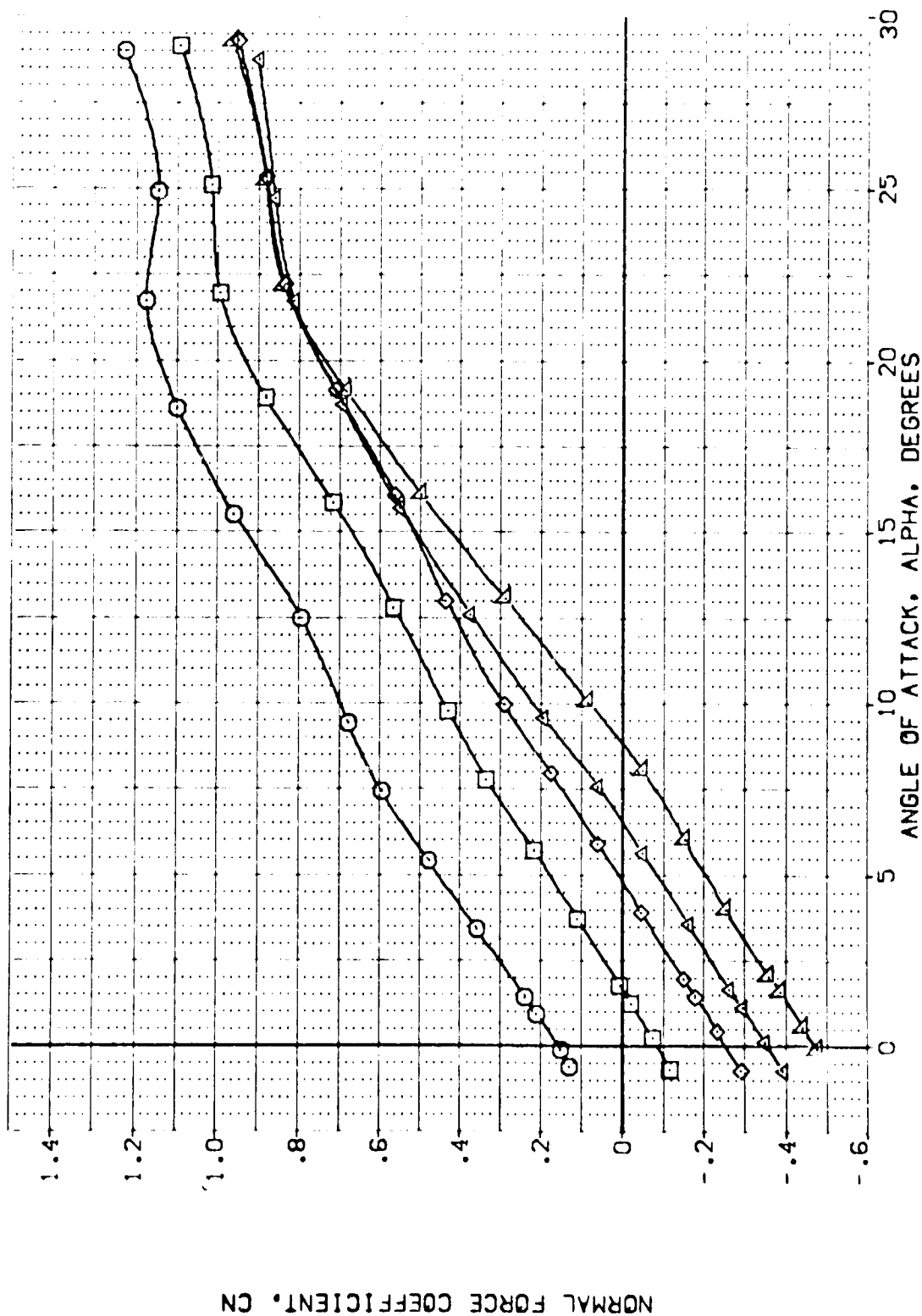


FIG. 7 ELEVON EFFECTS

(B) MACH = .80

DATA SET SYMBOL CONFIGURATION DESCRIPTION

DATA SET SYMBOL	CONFIGURATION	DESCRIPTION	ELEVON	AILERON	BOFLAP	SPDRBK	REFERENCE INFORMATION
(TEJ003)	ARC 11-747	DA53A B C H F VI	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(TEJ011)	ARC 11-747	DA53A B C H F VI	.000	.000	-11.700	25.000	LREF 14.2440 IN.
(TEJ002)	ARC 11-747	DA53A B C H F VI	-10.000	.000	-11.700	25.000	BREF 28.1004 IN.
(TEJ019)	ARC 11-747	DA53A B C H F VI	-20.000	.000	-11.700	25.000	YMRP 32.3010 IN.
(TEJ023)	ARC 11-747	DA53A B C H F VI	-40.000	.000	-11.700	25.000	ZMRP 11.2500 IN.
							SCALE .0300

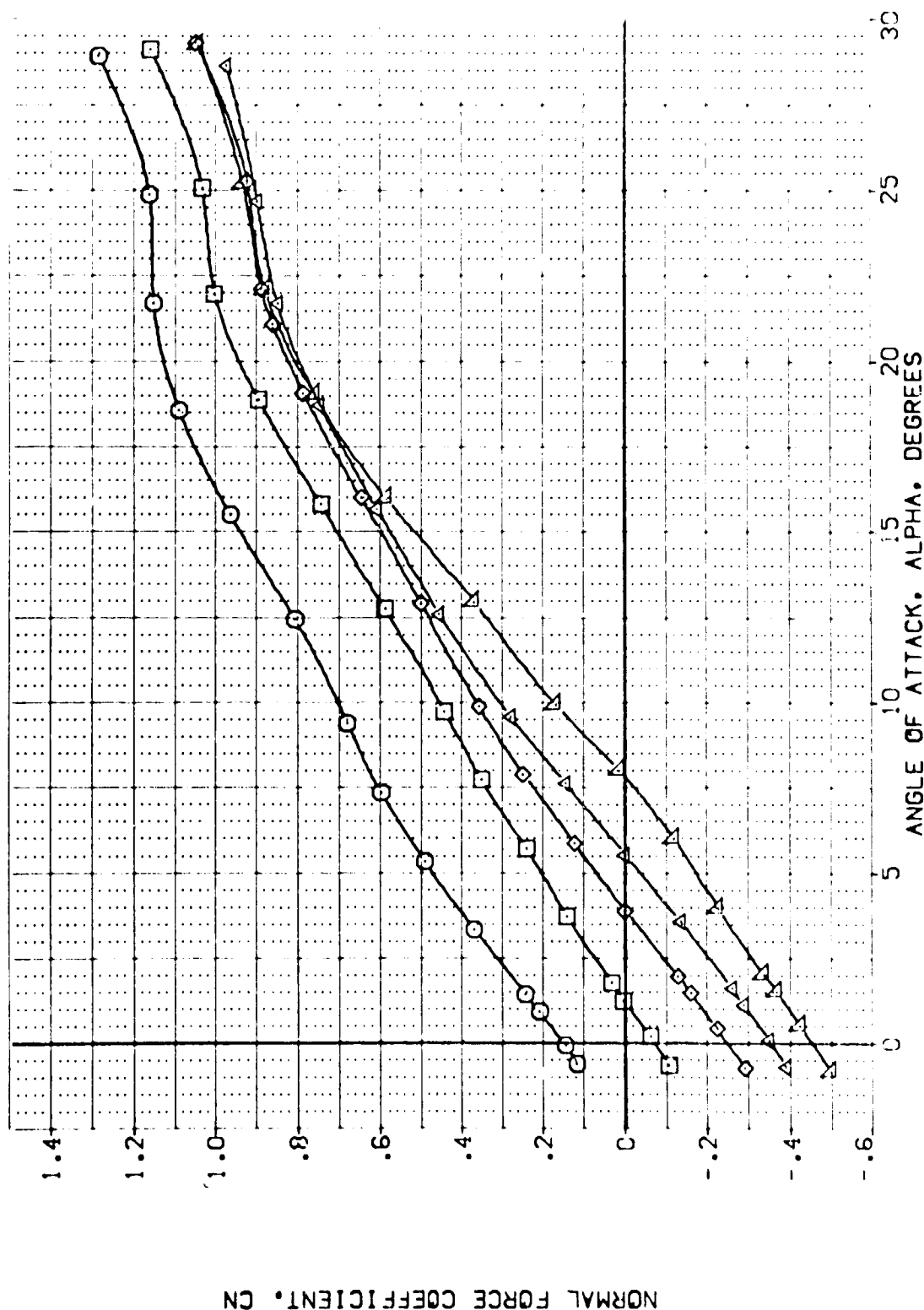


FIG. 7 ELEVON EFFECTS

(C)MACH = .90



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPDBRK	REFERENCE INFORMATION
[TEJ003]	ARC 11-747 DA53A B C M F VI V	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[TEJ011]	ARC 11-747 DA53A B C M F VI V	.000	.000	-11.700	25.000	LREF 14.2440 IN.
[TEJ002]	ARC 11-747 DA53A B C M F VI V	-10.000	.000	-11.700	25.000	BREF 28.1004 IN.
[TEJ019]	ARC 11-747 DA53A B C M F VI V	-20.000	.000	-11.700	25.000	XMRP 32.3010 IN.
[TEJ023]	ARC 11-747 DA53A B C M F VI V	-40.000	.000	-11.700	25.000	YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

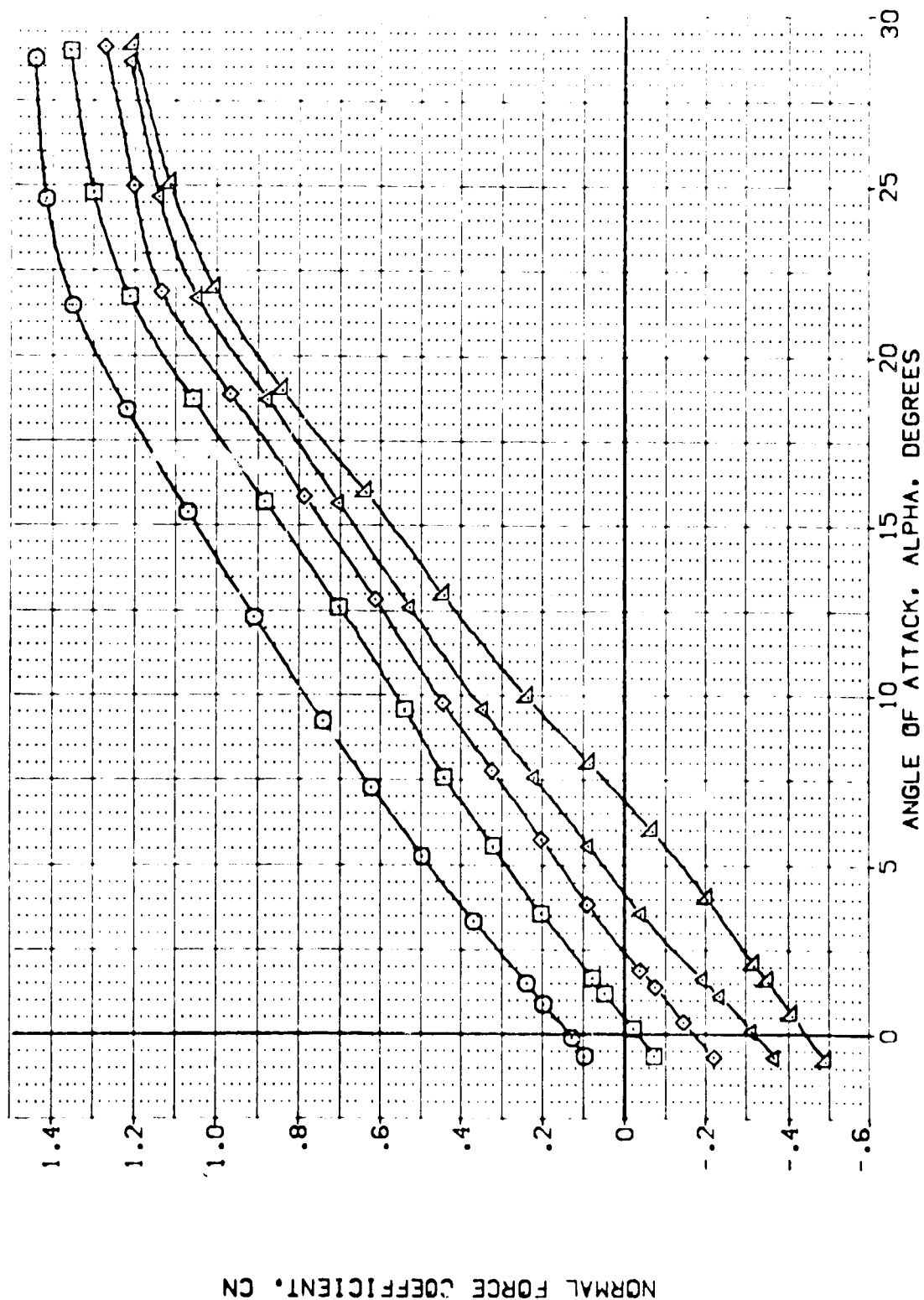


FIG. 7 ELEVON EFFECTS

COMACH = .05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPDRBK	REFERENCE INFORMATION
(TEJ003)	ARC 11-747 OAS3A B C M F VI V	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(TEJ011)	ARC 11-747 OAS3A B C M F VI V	.000	.000	-11.700	25.000	LREF 14.2440
(TEJ002)	ARC 11-747 OAS3A B C M F VI V	-10.000	.000	-11.700	25.000	BREF 28.1304
(TEJ019)	ARC 11-747 OAS3A B C M F VI V	-20.000	.000	-11.700	25.000	YMRP 32.3010
(TEJ023)	ARC 11-747 OAS3A B C M F VI V	-40.000	.000	-11.700	25.000	ZMRP 11.2500
						SCALE .0300

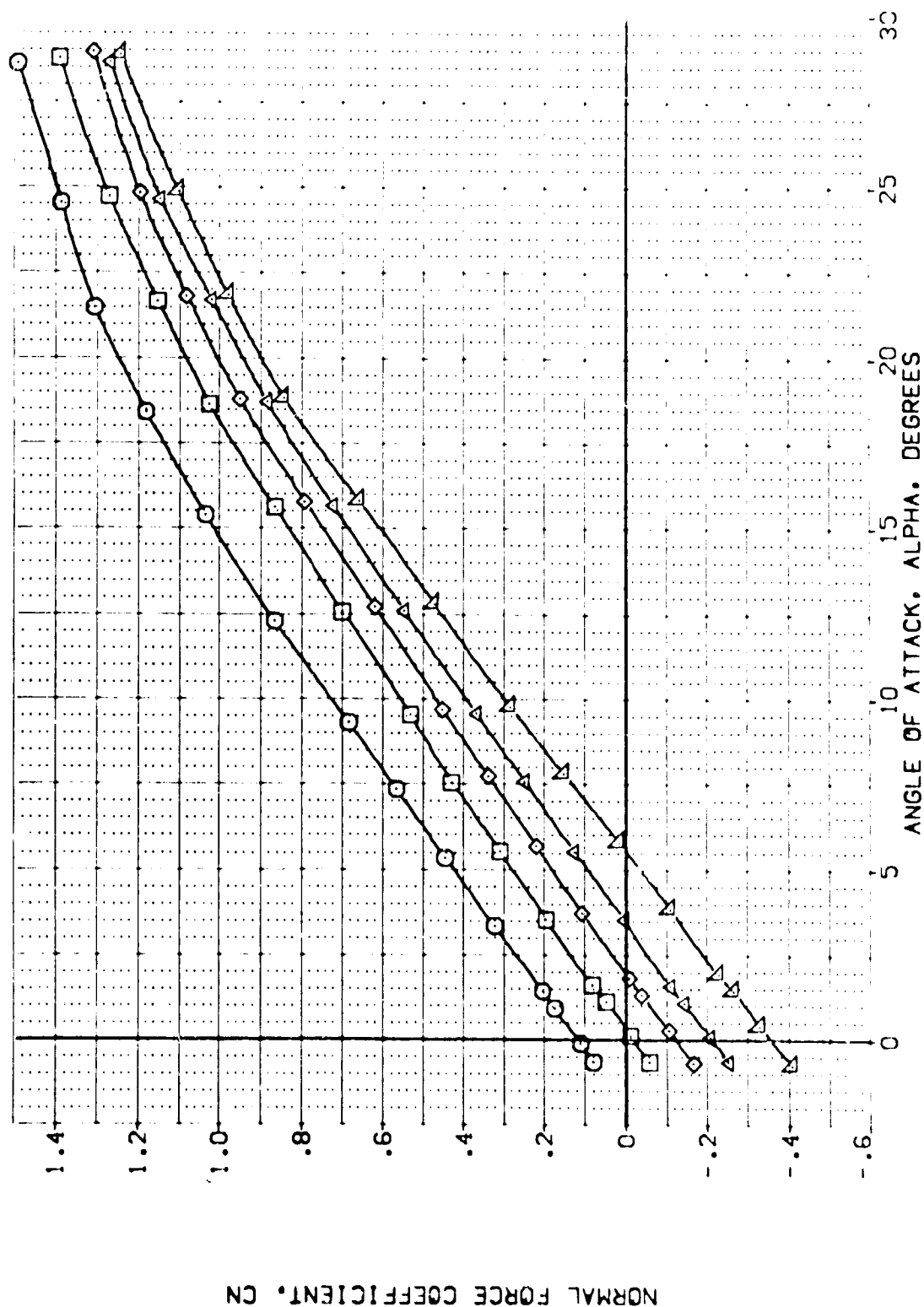


FIG. 7 ELEVON EFFECTS

(E)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPDRBK	REFERENCE INFORMATION
(TEJ003)	ARC 11-747 DA53A B C M F V1	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(TEJ011)	ARC 11-747 DA53A B C M F V1	.000	.000	-11.700	25.000	LREF 14.2440
(TEJ002)	ARC 11-747 DA53A B C M F V1	-10.000	.000	-11.700	25.000	BREF 28.1004
(TEJ019)	ARC 11-747 DA53A B C M F V1	-20.000	.000	-11.700	25.000	XREF 32.3010
(TEJ023)	ARC 11-747 DA53A B C M F V1	-40.000	.000	-11.700	25.000	YREF 11.2500
						SCALE .0300

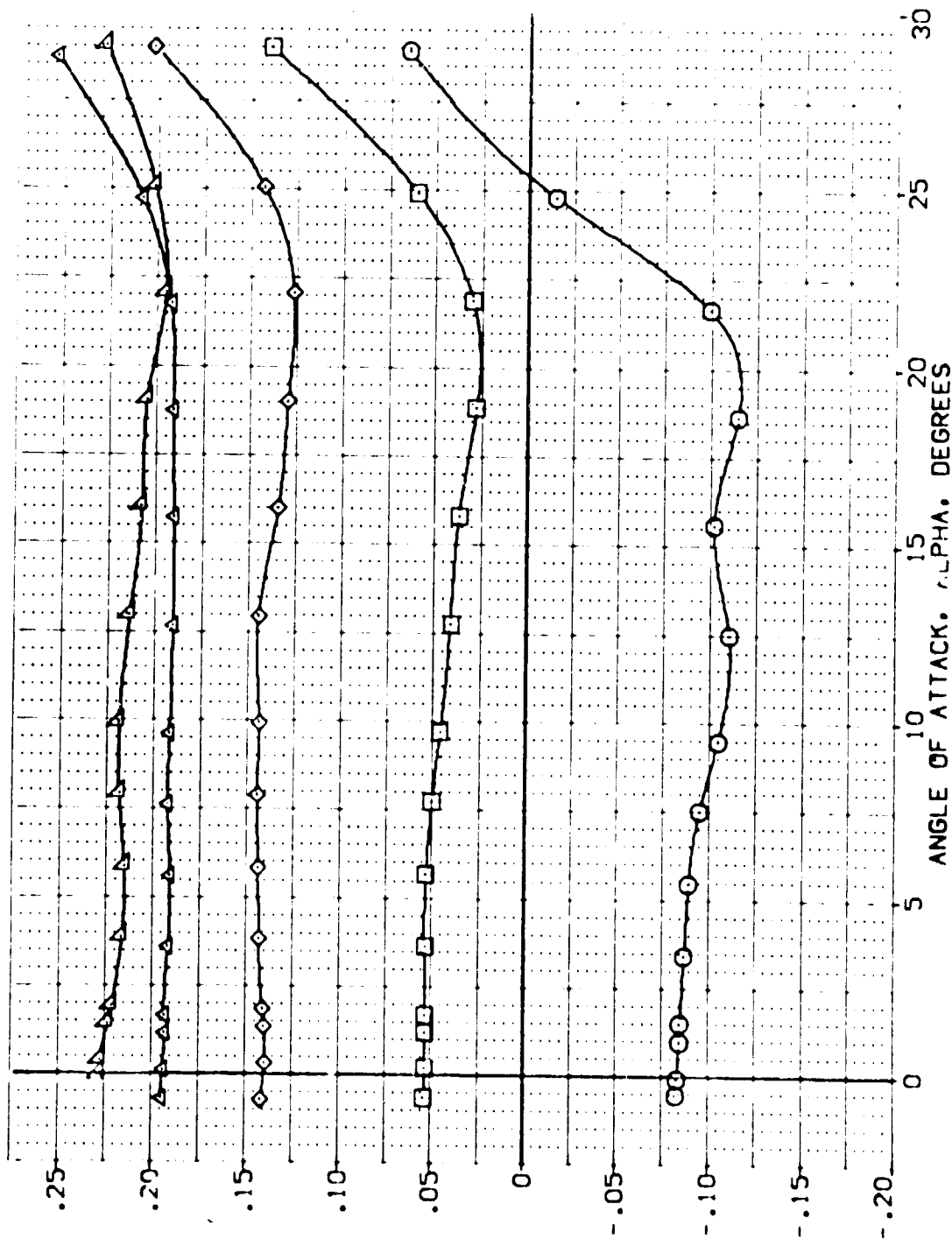


FIG. 7 ELEVON EFFECTS

(A)MACH = .60



DATA SET SYMBOL CONFIGURATION DESCRIPTION

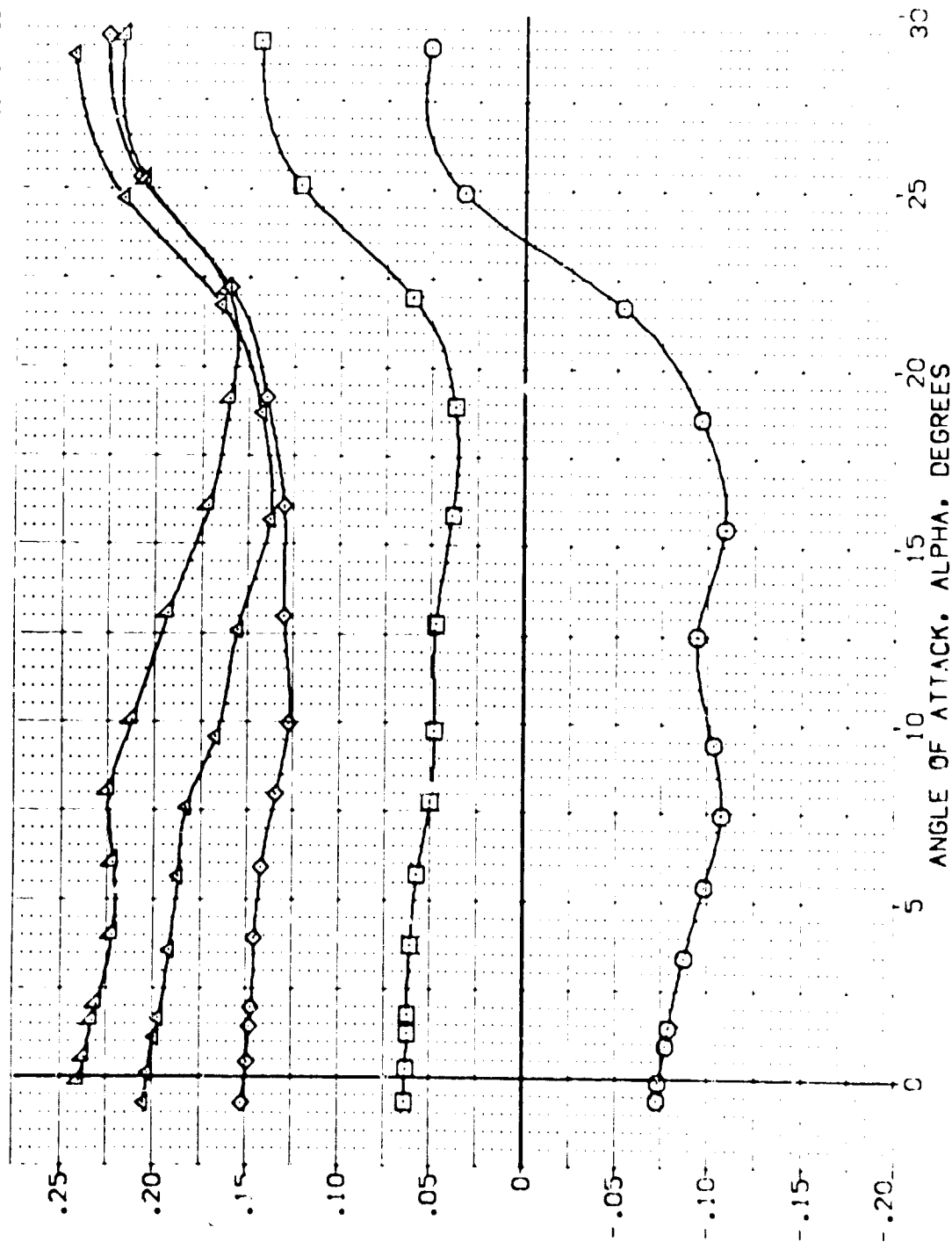
[1E-003]	ARC 11-747	CA53A	B	C	H	F	V	V
[1E-011]	ARC 11-747	CA53A	B	C	H	F	V	V
[1E-002]	ARC 11-747	CA53A	B	C	H	F	V	V
[1E-019]	ARC 11-747	CA53A	B	C	H	F	V	V
[1E-023]	ARC 11-747	CA53A	B	C	H	F	V	V

ELEVON  
15.000  
-10.000  
-20.000  
-40.000

AILERON  
.000  
.000  
.000  
.000

SPDRBK  
25.000  
25.000  
25.000  
25.000

REFERENCE INFORMATION  
SREF 2.4210 50. FT.  
LREF 14.2440  
BREF 28.1004  
XREF 30.3010  
YREF .0000  
ZREF 11.7500  
SCALE 0.000



PITCHING MOMENT COEFFICIENT (Cm), CLMFW

FIG. 7 ELEVON EFFECTS

(8)MACH = .80

DATA SET SYMBL	CONFIGURATION DESCRIPTION	ELEVON	AILEON	BDCLAP	SPOBRK	REFERENCE INFORMATION
[TEJ003]	ARC 11-747 OAS3A B C M F V1	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[TEJ011]	ARC 11-747 OAS3A B C M F V1	.000	.000	-11.700	25.000	LREF 14.2410 IN.
[TEJ002]	ARC 11-747 OAS3A B C M F V1	-10.000	.000	-11.700	25.000	BREF 28.1004 IN.
[TEJ019]	ARC 11-747 OAS3A B C M F V1	-20.000	.000	-11.700	25.000	XMRP 32.3010 IN.
[TEJ023]	ARC 11-747 OAS3A B C M F V1	-40.000	.000	-11.700	25.000	YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

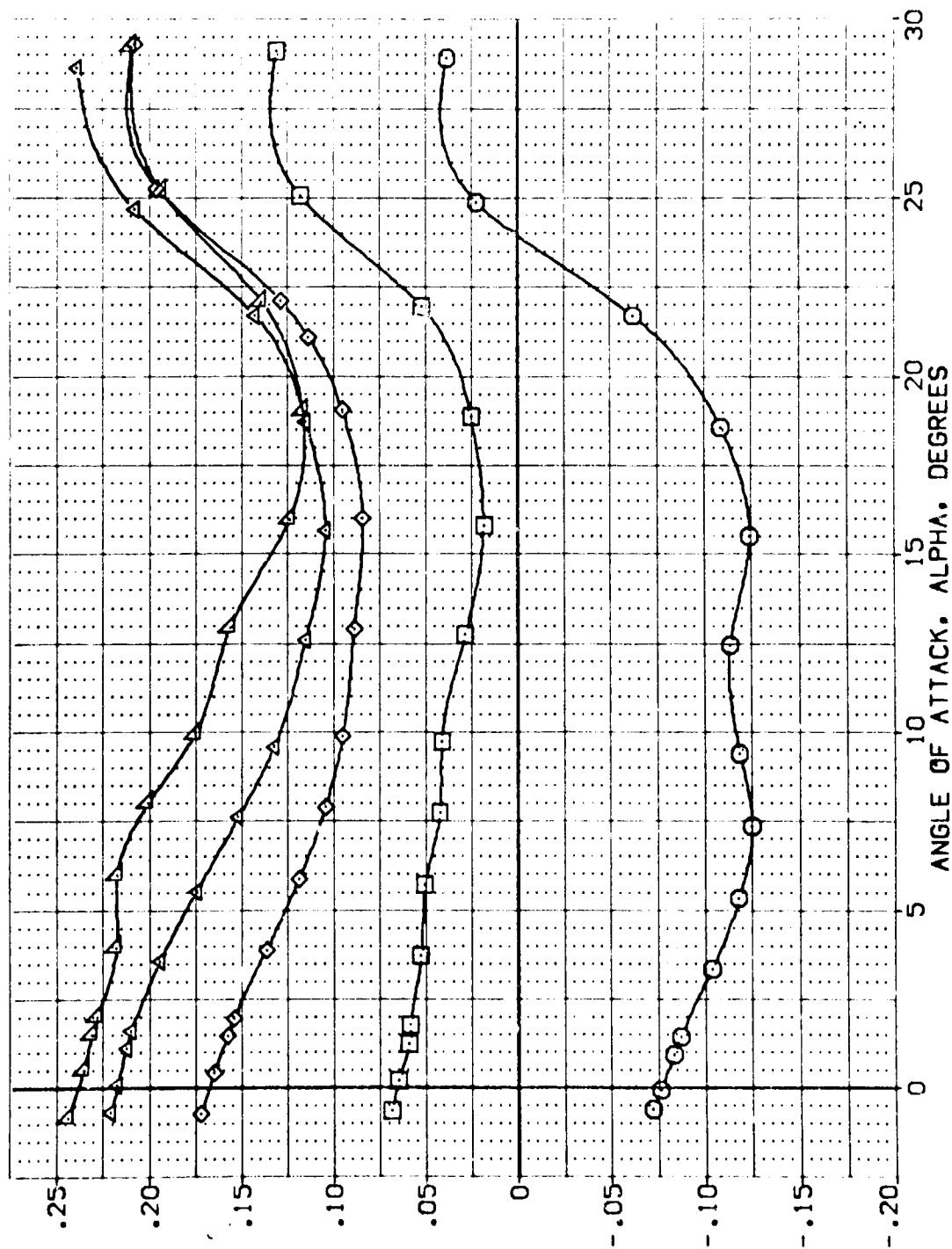


FIG. 7 ELEVON EFFECTS

(C)MACH = .90



DATA SET SYMBOL		CONFIGURATION DESCRIPTION		ELEVON		AILERON		BDF LAP		SPDBRK		REFERENCE INFORMATION	
[TEJ003]	Q	ARC 11-747	CAS3A B C M F VI V	15.000	.000	-11.700	25.000	SREF	2.4210	SO.F.T.			
[TEJ011]	X	ARC 11-747	CAS3A B C M F VI V	.000	.000	-11.700	25.000	LREF	14.2440				
[TEJ002]	X	ARC 11-747	CAS3A B C M F VI V	-10.000	.000	-11.700	25.000	BREF	28.1004				
[TEJ019]	X	ARC 11-747	CAS3A B C M F VI V	-20.000	.000	-11.700	25.000	YMRP	32.3010				
[TEJ023]	X	ARC 11-747	CAS3A B C M F VI V	-40.000	.000	-11.700	25.000	ZMRP	11.2500				
								SCALE	.0300	SCALE			

PITCHING MOMENT COEFFICIENT (FWD C.G.), CLMFW

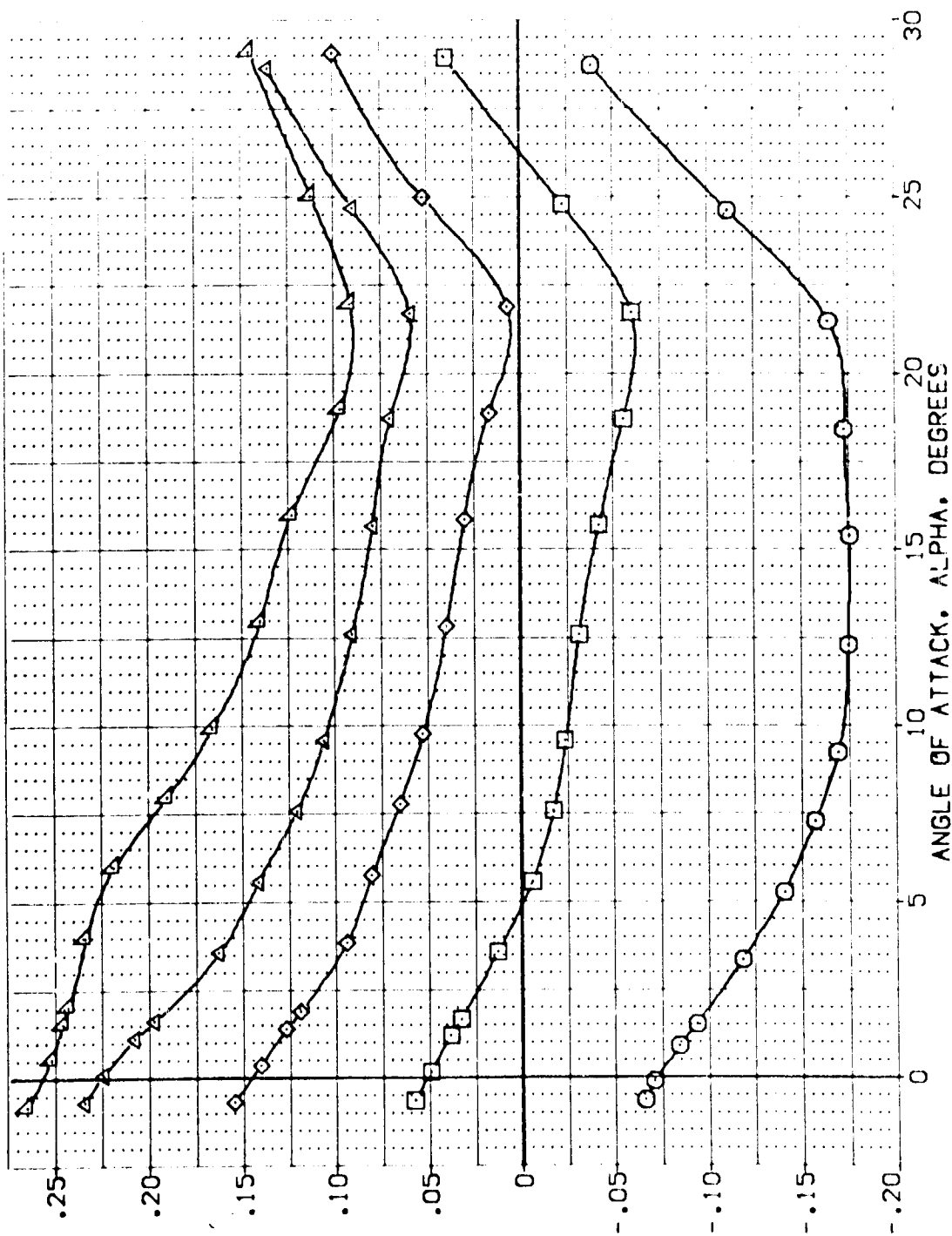


FIG. 7 ELEVON EFFECTS

(0)MACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NOTES	ELEVON	AIRLON	BOFLAP	SPDBRK	REFERENCE INFORMATION
(TEJ003)	ARC 11-747 DA53A B C M F VI V	NOT: RV/L	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(TEJ011)	ARC 11-747 DA53A B C M F VI V	NOT: RV/L	.000	.000	-11.700	25.000	LREF 14.2440 IN.
(TEJ002)	ARC 11-747 DA53A B C M F VI V	NOT: RV/L	-10.000	.000	-11.700	25.000	BREF 28.1004 IN.
(TEJ019)	ARC 11-747 DA53A B C M F VI V	NOT: RV/L	-20.000	.000	-11.700	25.000	XMRP 32.3010 IN.
(TEJ023)	ARC 11-747 DA53A B C M F VI V	NOT: RV/L	-40.000	.000	-11.700	25.000	YMRP .0000 IN.
							ZMRP 11.2500 IN.
							SCALE .0300

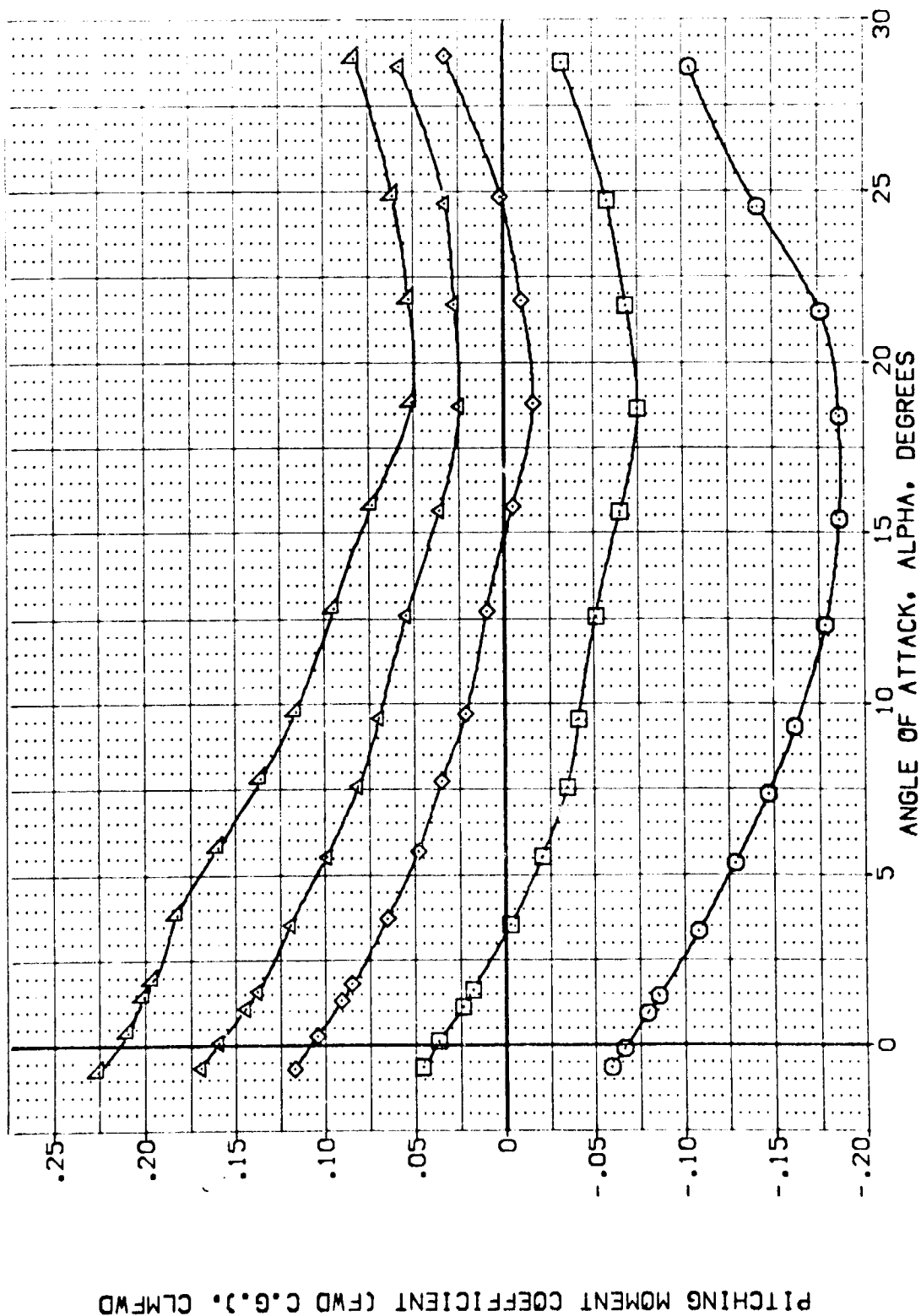


FIG. 7 ELEVON EFFECTS

(E)MACH = 1.20



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NON.	RV/L	ELEVON	AILERON	BOFLAP	SPDBRK	REFERENCE INFORMATION
[TEJ003]	ARC 11-747 GAS3A B C M F VI V	NON.	RV/L	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[TEJ011]	ARC 11-747 GAS3A B C M F VI V	NON.	RV/L	.000	.000	-11.700	25.000	LREF 14.2440
[TEJ002]	ARC 11-747 GAS3A B C M F VI V	NON.	RV/L	-10.000	.000	-11.700	25.000	BREF 28.1004
[TEJ019]	ARC 11-747 GAS3A B C M F VI V	NON.	RV/L	-20.000	.000	-11.700	25.000	XMRP 32.3010
[TEJ023]	ARC 11-747 GAS3A B C M F VI V	NON.	RV/L	-40.000	.000	-11.700	25.000	YMRP .0000
								ZMRP 11.2500
								SCALE .0300

PITCHING MOMENT COEFFICIENT (CFT C.G.), CLMFT

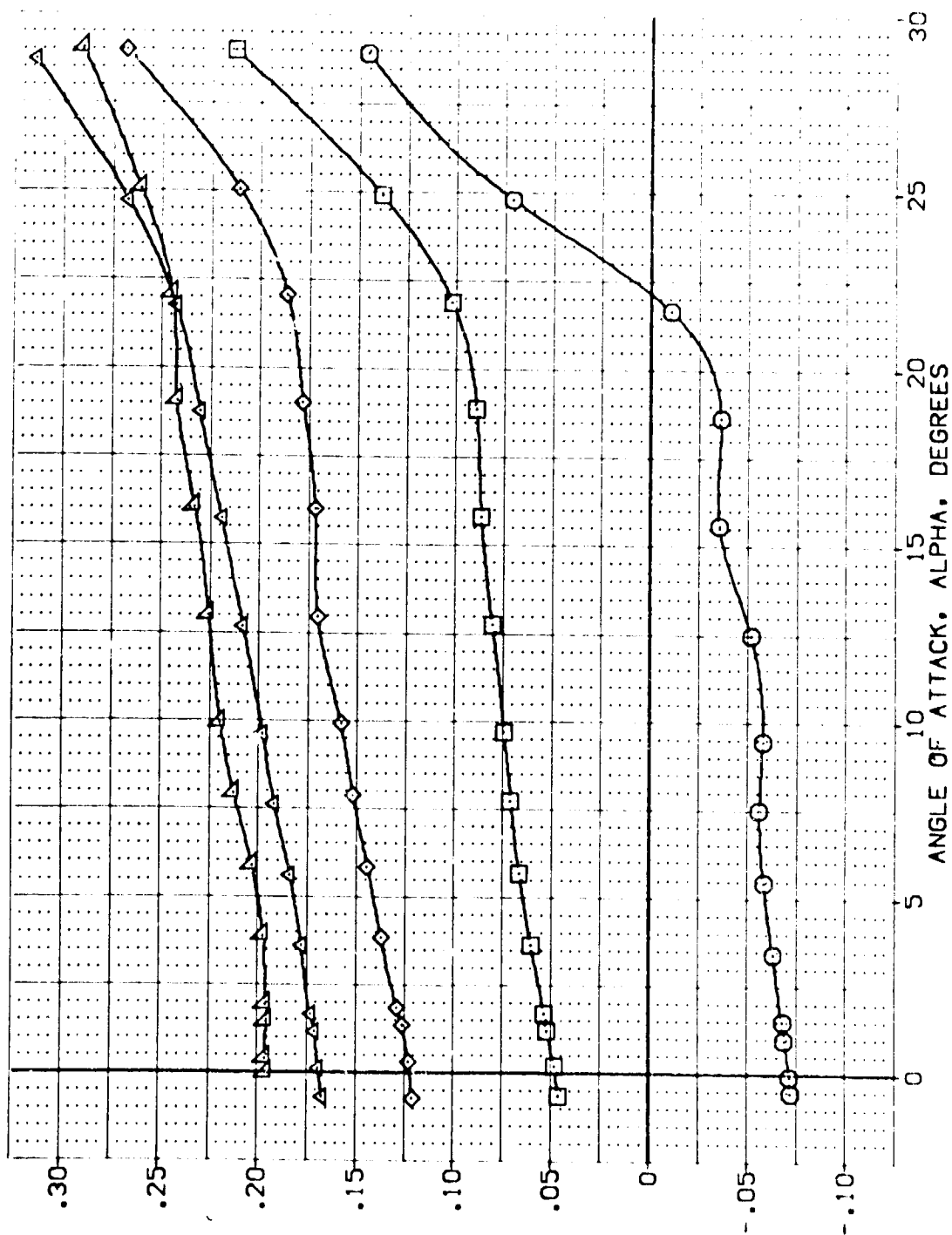


FIG. 7 ELEVON EFFECTS

(A)MACH = .60



PITCHING MOMENT COEFFICIENT (C<sub>PM</sub>), CLMFT

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPDRBK	REFERENCE INFORMATION
[TEJ003]	ARC 11-747 DA53A B C M F VI	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[TEJ011]	ARC 11-747 DA53A B C M F VI	.000	.000	-11.700	25.000	LREF 14.2440 IN.
[TEJ002]	ARC 11-747 DA53A B C M F VI	-10.000	.000	-11.700	25.000	BREF 28.1004 IN.
[TEJ019]	ARC 11-747 DA53A B C M F VI	-20.000	.000	-11.700	25.000	XMRP 32.3010 IN.
[TEJ023]	ARC 11-747 DA53A B C M F VI	-40.000	.000	-11.700	25.000	ZMRP 11.2500 IN.
						SCALE .0300

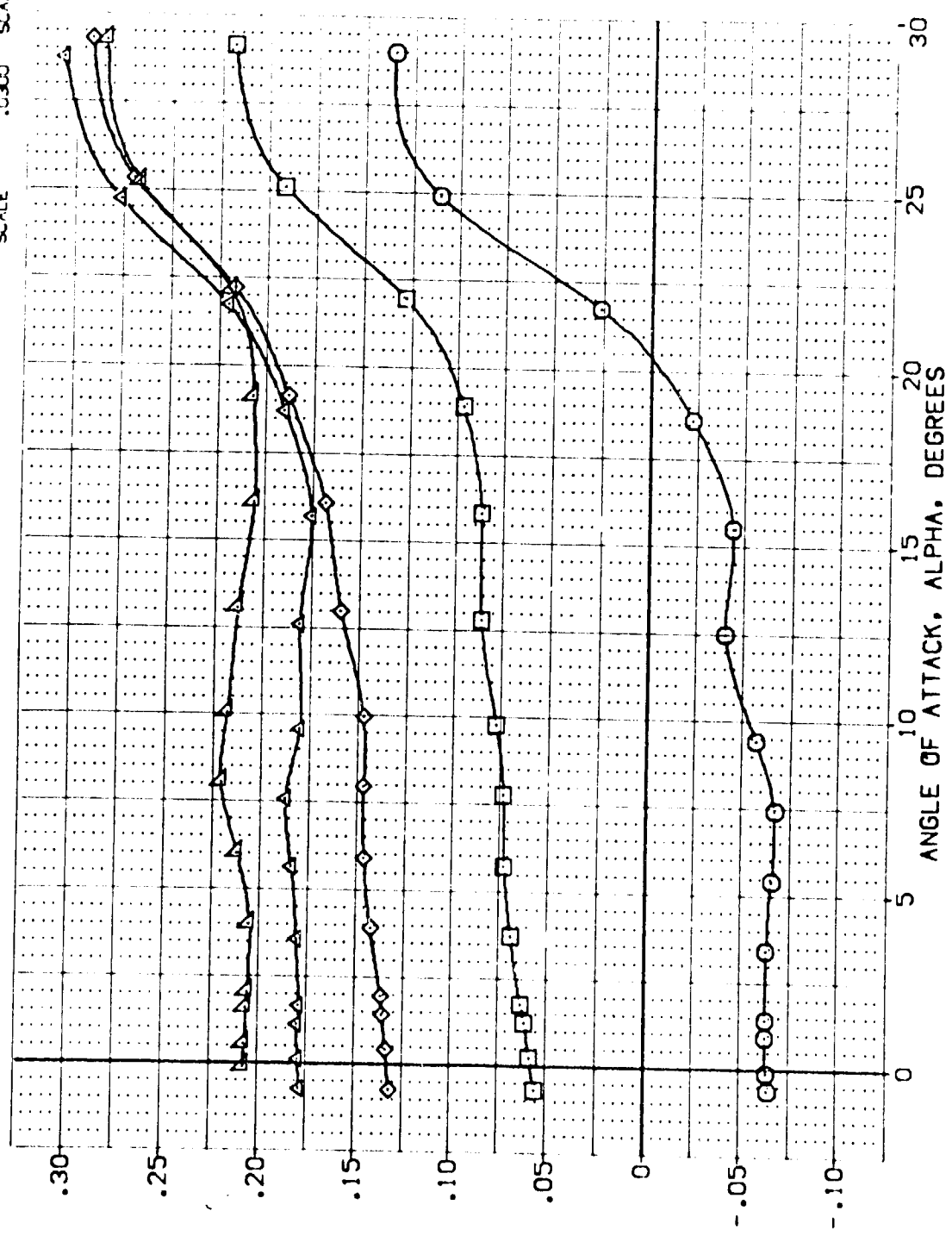


FIG. 7 ELEVON EFFECTS

(B)MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NOI	RV/L	ELEVON	AIRLON	BOFLAP	SPOBRK	REFERENCE INFORMATION
{TEJ009}	ARC 11-747 DA53A B C H F VI V	NOI	RV/L	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
{TEJ011}	ARC 11-747 DA53A B C H F VI V	NOI	RV/L	10.000	.000	-11.700	25.000	LREF 14.2440 IN.
{TEJ002}	ARC 11-747 DA53A B C H F VI V	NOI	RV/L	-10.000	.000	-11.700	25.000	BREF 28.1004 IN.
{TEJ019}	ARC 11-747 DA53A B C H F VI V	NOI	RV/L	-20.000	.000	-11.700	25.000	XMRP 32.3010 IN.
{TEJ023}	ARC 11-747 DA53A B C H F VI V	NOI	RV/L	-40.000	.000	-11.700	25.000	YMRP .0000 IN.
								ZMRP 11.2500 IN.
								SCALE .0300

PITCHING MOMENT COEFFICIENT (CFT C.G.), CLMAFT

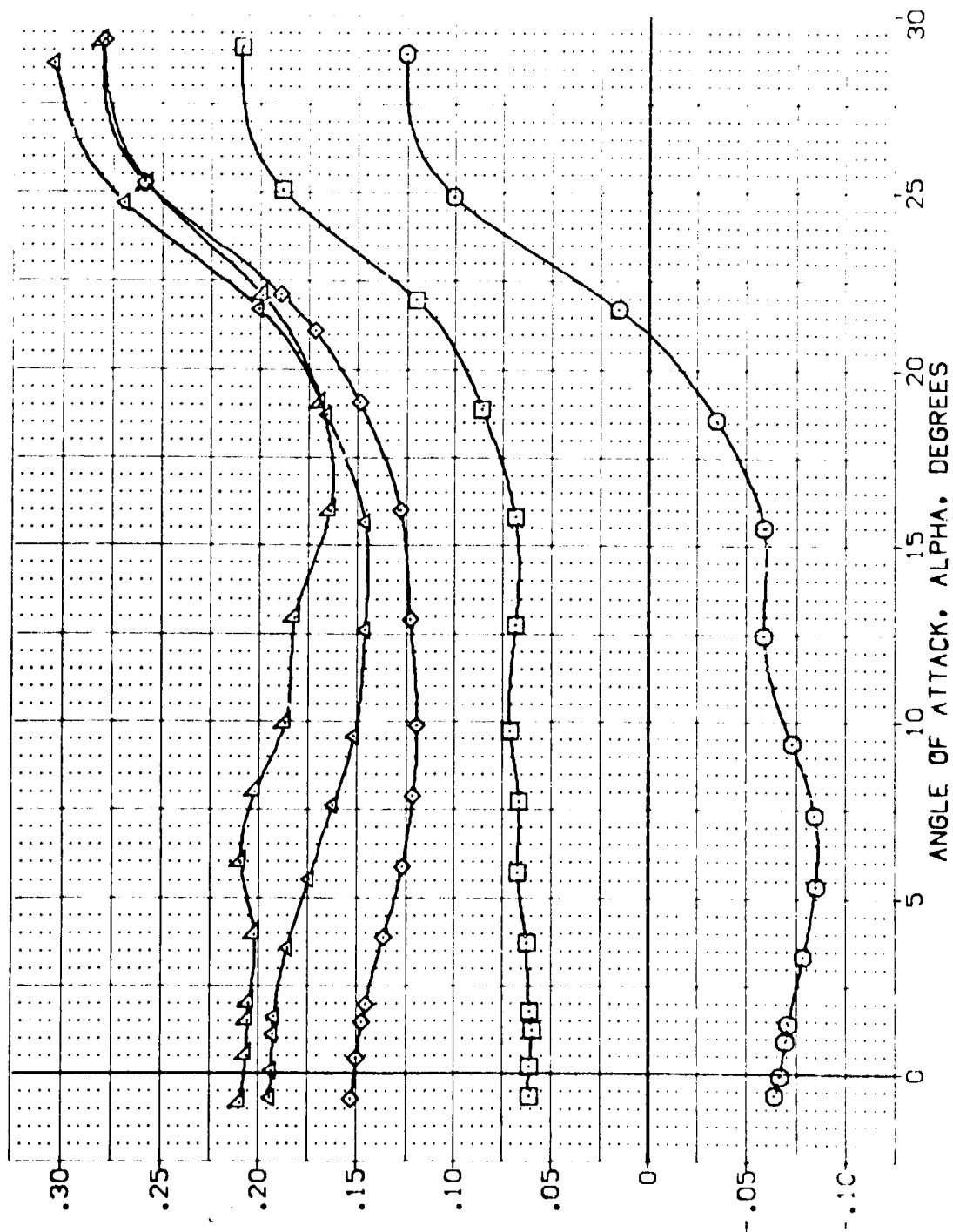


FIG. 7 ELEVON EFFECTS

(C)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NON	RV/L	ELEVON	AILERON	BOFLAP	SPDRBK	REFERENCE INFORMATION
(TEJ003)	ARC 11-747 QAS3A B C H F VI	V	RV/L	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(TEJ011)	ARC 11-747 QAS3A B C H F VI	V	RV/L	15.000	.000	-11.700	25.000	LREF 14.2440 IN.
(TEJ002)	ARC 11-747 QAS3A B C H F VI	V	RV/L	-10.000	.000	-11.700	25.000	BREF 28.1004
(TEJ019)	ARC 11-747 QAS3A B C H F VI	V	RV/L	-20.000	.000	-11.700	25.000	XMRP 32.3010
(TEJ023)	ARC 11-747 QAS3A B C H F VI	V	RV/L	-40.000	.000	-11.700	25.000	YMRP .0000
								ZMRP 11.2500
								SCALE .0300

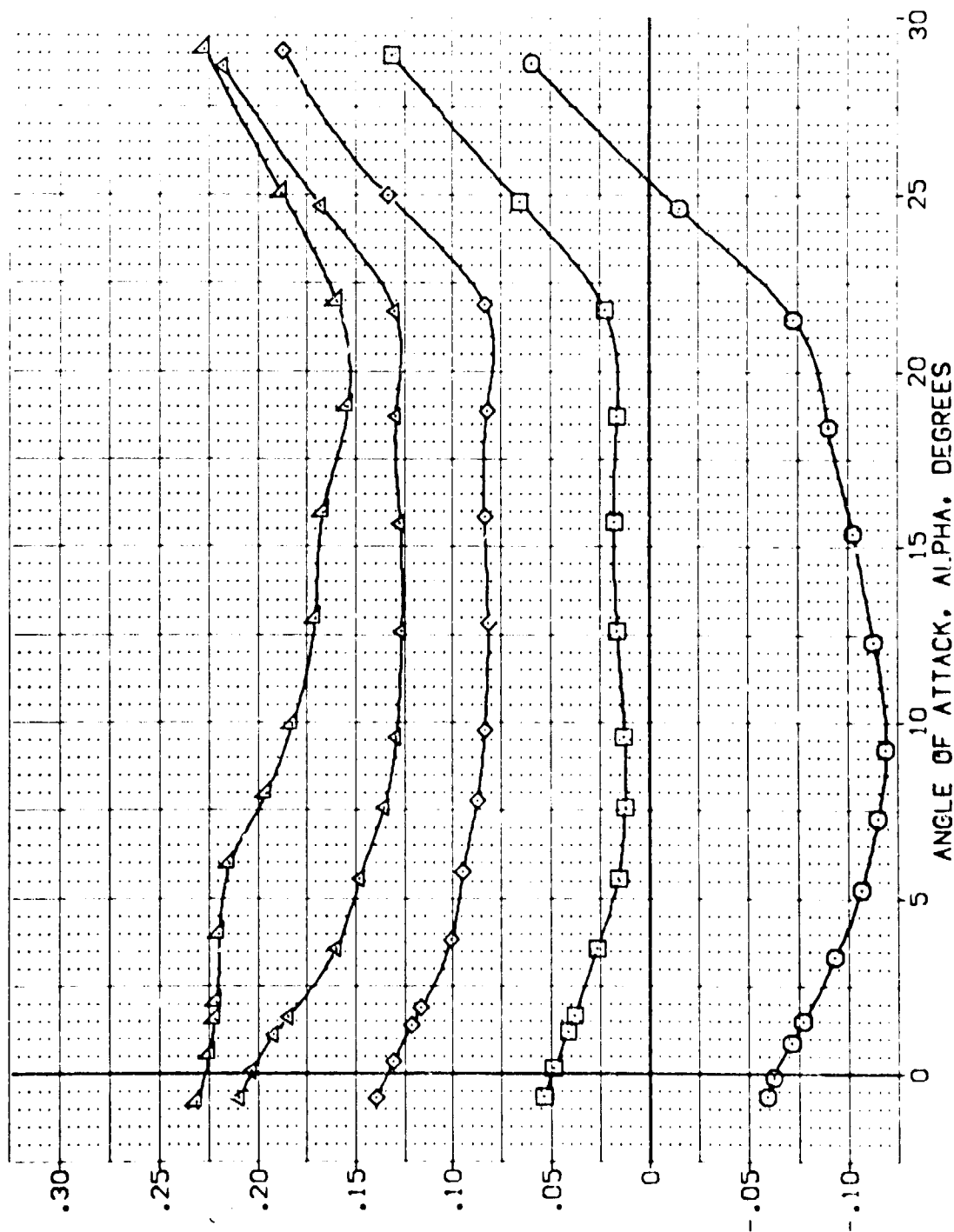


FIG. 7 ELEVON EFFECTS

COMACH = 1.05



DATA SET SYMBOL    CONFIGURATION DESCRIPTION    ELEVON    AILERON    BOFLAP    SPODBK    REFERENCE INFORMATION, SQ. FT.

[TEJ003]	ARC    -747 DA53A B C M F VI V	15.000	.000	-11.700	25.000	SREF	2.4210
[TEJ011]	ARC    -747 DA53A B C M F VI V	.000	.000	-11.700	25.000	LREF	14.2440
[TEJ002]	ARC    -747 DA53A B C M F VI V	-10.000	.000	-11.700	25.000	BREF	28.1004
[TEJ019]	ARC    -747 DA53A B C M F VI V	-20.000	.000	-11.700	25.000	YMRP	32.3010
[TEJ023]	ARC    -747 DA53A B C M F VI V	-40.000	.000	-11.700	25.000	ZMRP	.0000
						SCALE	11.2500
							.0300

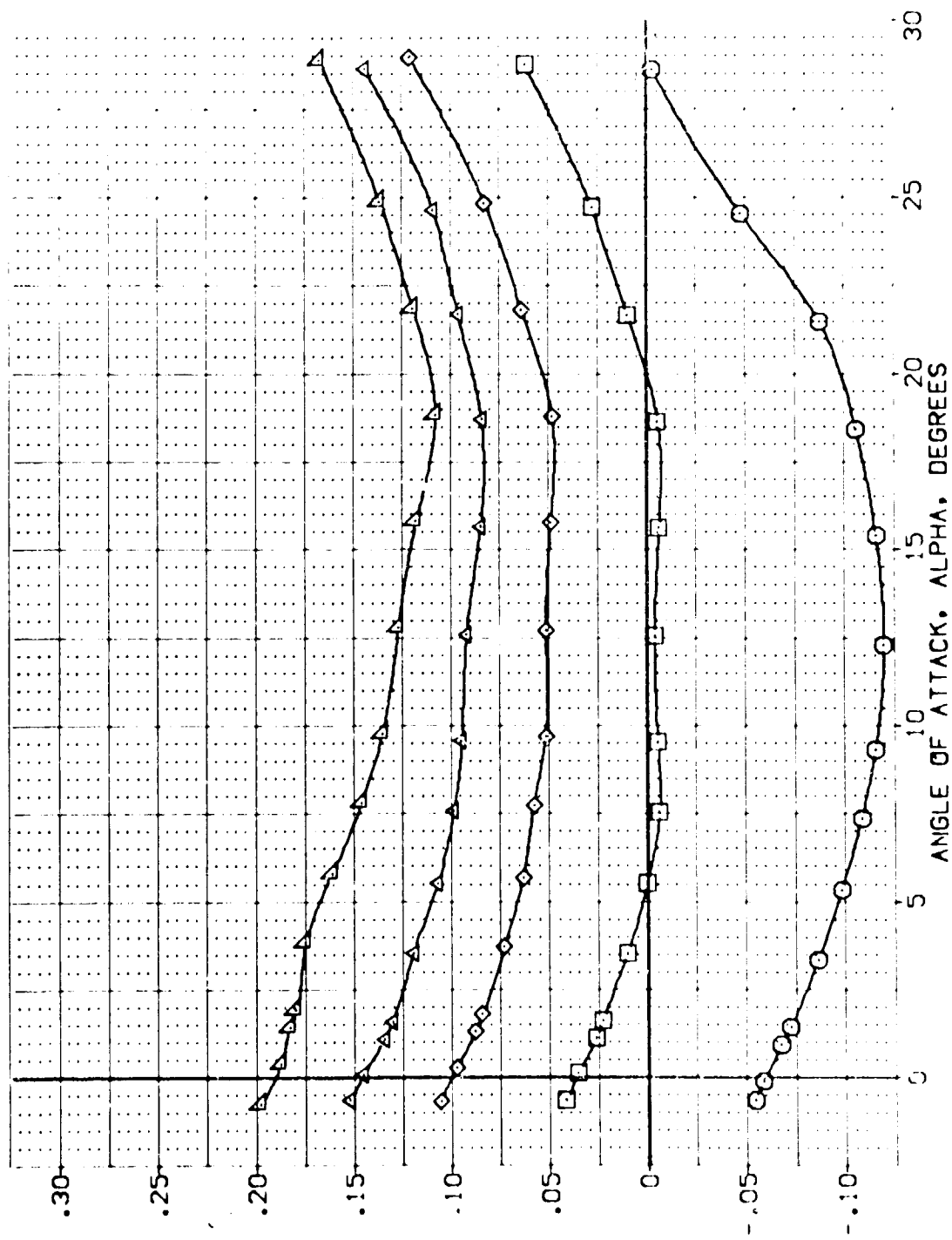


FIG. 7 ELEVON EFFECTS

(E)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	REF. INFO	SCALE
[TEJ003]	ARC 11-747 C-53A B C M F V	SREF 2.4210	SC. FT.
[TEJ011]	ARC 11-747 C-53A B C M F V	LREF 14.2440	
[TEJ002]	ARC 11-747 C-53A B C M F V	BREF 28.0000	
[TEJ010]	ARC 11-747 C-53A B C M F V	XREF 32.0000	
[TEJ023]	ARC 11-747 C-53A B C M F V	YREF 11.2500	
		ZREF 11.0000	
		SCALE 1.0000	

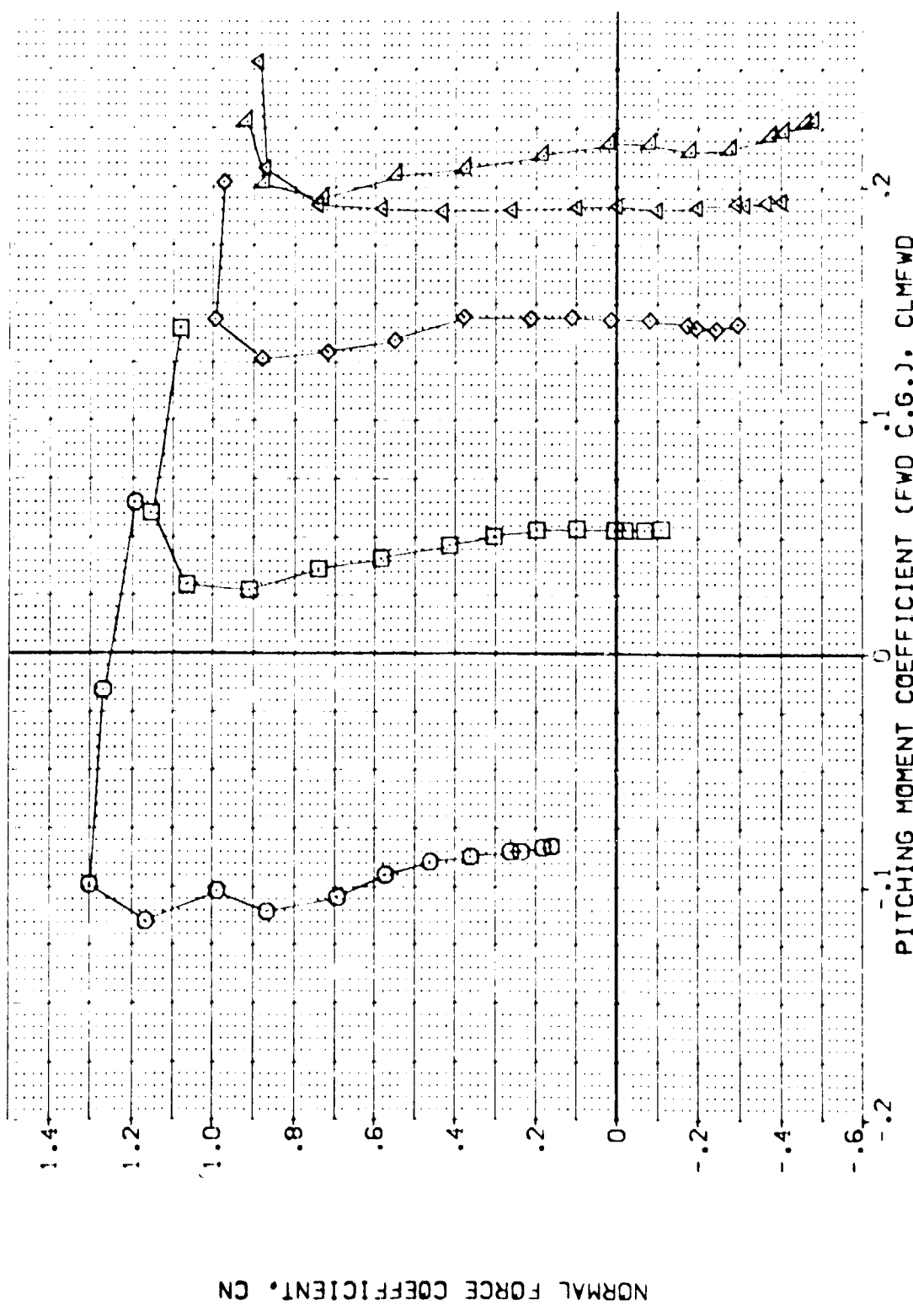


FIG. 7 ELEVON EFFECTS

(ADMACH = .60)



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NO.	BNVL	ELEVON	AILERON	BDFLAP	SPDRBK	REFERENCE INFORMATION
[TEJ003]	ARC 11-747 BA53A B C M F VI V	NO.	BNVL	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[TEJ011]	ARC 11-747 BA53A B C M F VI V	NO.	BNVL	.000	.000	-11.700	25.000	LREF 14.2440
[TEJ002]	ARC 11-747 BA53A B C M F VI V	NO.	BNVL	-10.000	.000	-11.700	25.000	BREF 28.1004
[TEJ019]	ARC 11-747 BA53A B C M F VI V	NO.	BNVL	-20.000	.000	-11.700	25.000	XPRP 32.3010
[TEJ023]	ARC 11-747 BA53A B C M F VI V	NO.	BNVL	-40.000	.000	-11.700	25.000	YPRP .0000
								ZPRP .0000
								SCALE 11.2500

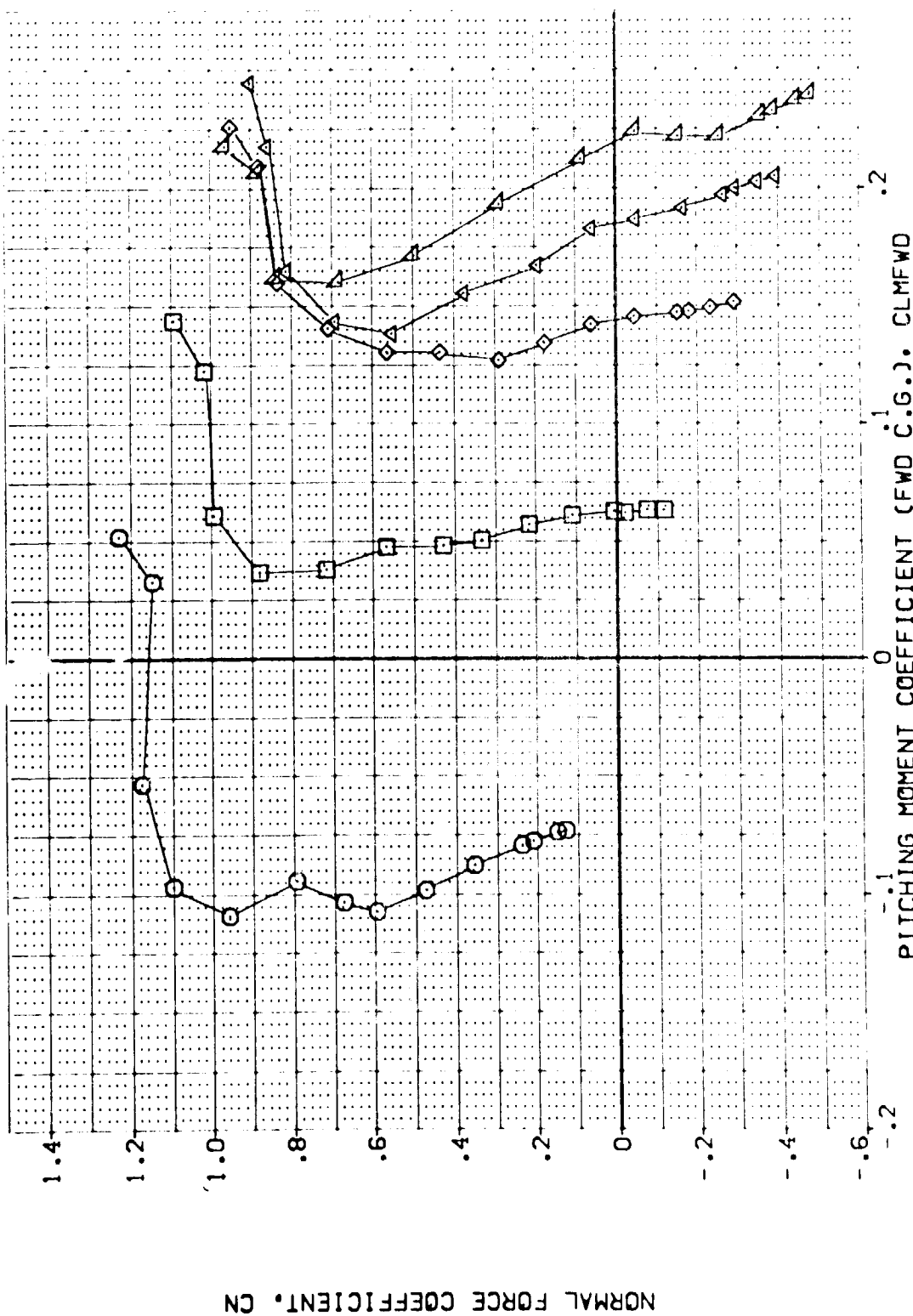


FIG. 7 ELEVON EFFECTS

(B) MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPDBRK	REFERENCE INFORMATION
[TEJ003]	ARC 11-747 DASSA B C H F VI	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[TEJ011]	ARC 11-747 DASSA B C H F VI	.000	.000	-11.700	25.000	LREF 14.2440
[TEJ002]	ARC 11-747 DASSA B C H F VI	-10.000	.000	-11.700	25.000	BREF 28.1004
[TEJ019]	ARC 11-747 DASSA B C H F VI	-20.000	.000	-11.700	25.000	XMRP 32.3010
[TEJ023]	ARC 11-747 DASSA B C H F VI	-40.000	.000	-11.700	25.000	YMRP 11.2500
						SCALE .0300

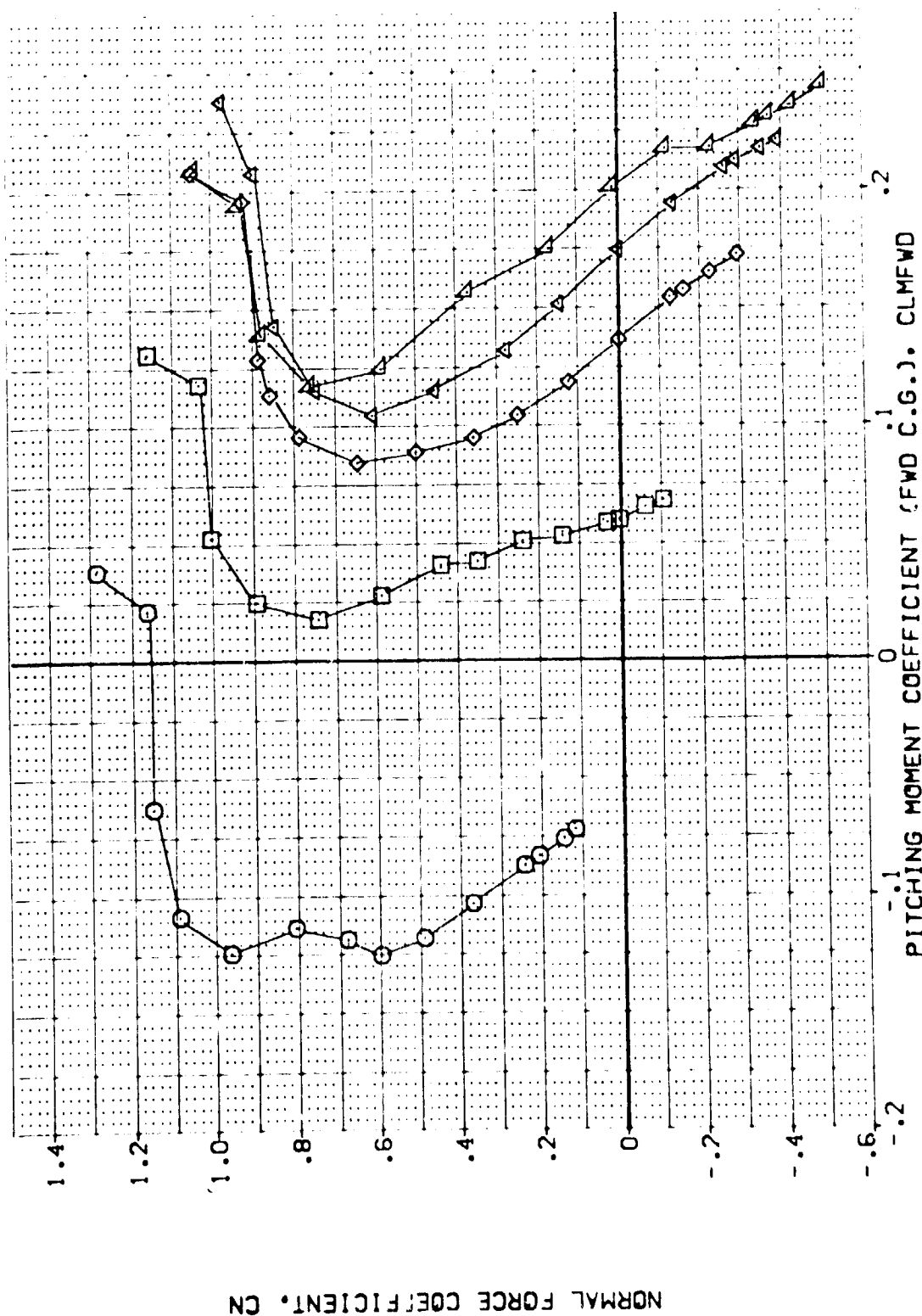


FIG. 7 ELEVON EFFECTS

(C)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NO.	RV/L	ELEVON	AIRLON	EDFLAP	POBPK	REFERENCE INFORMATION
(1EJ003)	ARC 11-747 CAS3A B C H F VI V	NO.	RV/L	15.000	.000	-11.700	5.000	SREF 2.4210 SC.FT.
(1EJ011)	ARC 11-747 CAS3A B C H F VI V	NO.	RV/L	.000	.000	-11.700	5.000	LREF 14.2440
(1EJ002)	ARC 11-747 CAS3A B C H F VI V	NO.	RV/L	-10.000	.000	-11.700	5.000	BREF 28.1004
(1EJ019)	ARC 11-747 CAS3A B C H F VI V	NO.	RV/L	-20.000	.000	-11.700	25.000	XMRP 32.3010
(1EJ023)	ARC 11-747 CAS3A B C H F VI V	NO.	RV/L	-40.000	.000	-11.700	25.000	ZMRP 11.2500
								SCALE 11.0300

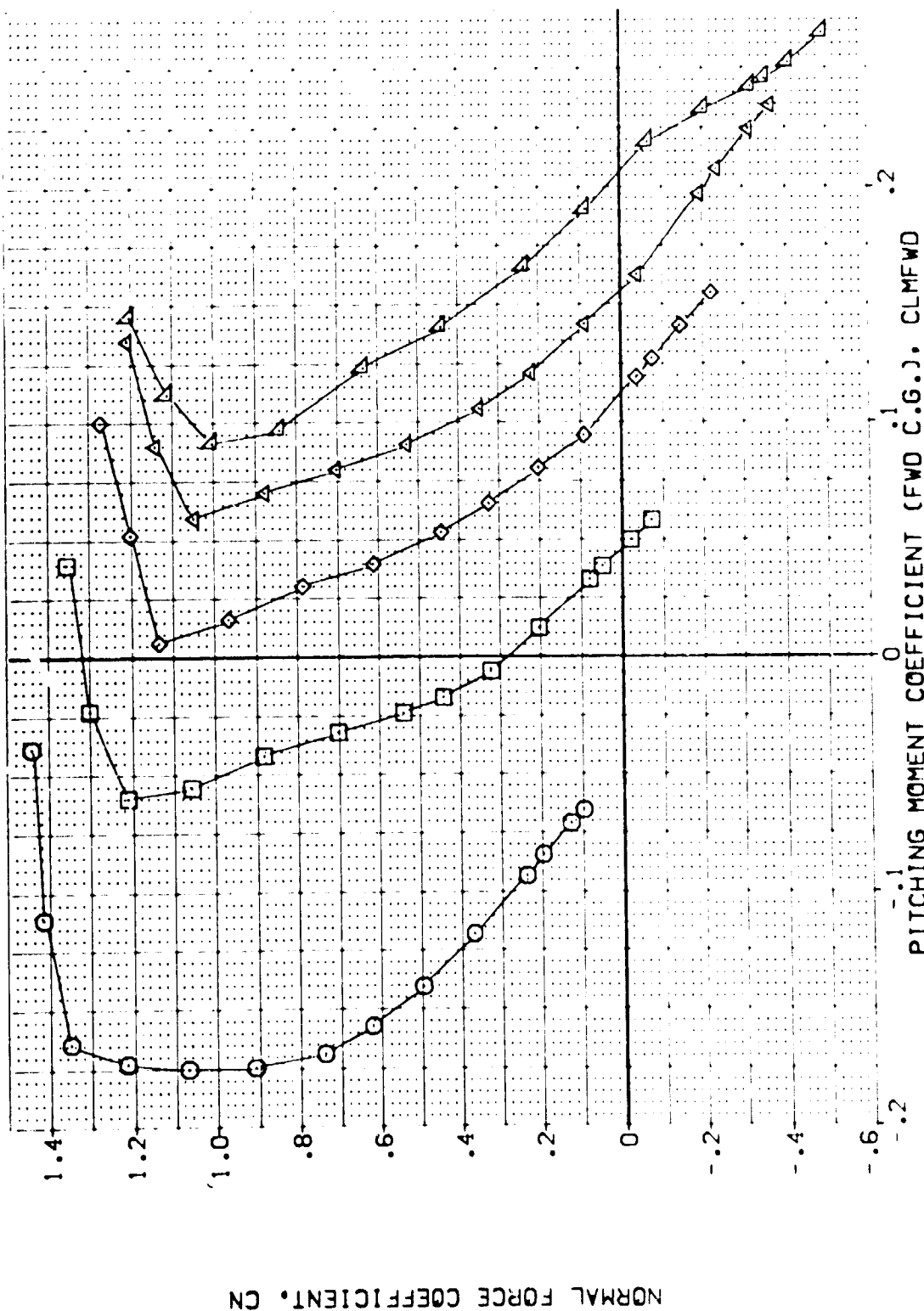


FIG. 7 ELEVON EFFECTS

(C)MACH = 1.05

DATA SET SYMBOL CONFIGURATION DESCRIPTION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(TEJ003)	ARC 11-747 DA53A B C M F V
(TEJ011)	ARC 11-747 DA53A B C M F V
(TEJ002)	ARC 11-747 DA53A B C M F V
(TEJ019)	ARC 11-747 DA53A B C M F V
(TEJ023)	ARC 11-747 DA53A B C M F V

REFERENCE INFORMATION

REFERENCE INFORMATION	SCALE
SREF 2.4210	50. FT.
REF 14.2440	
REF 28.004	
XMRP 32.3010	
YMRP .0000	
ZMRP 11.7500	
SCALE 11.0300	

ELEVON AIRLON BOFLAP SPOBRK

ELEVON	AIRLON	BOFLAP	SPOBRK
15.000	.000	-11.700	25.000
.000	.000	-11.700	25.000
-10.000	.000	-11.700	25.000
-20.000	.000	-11.700	25.000
-40.000	.000	-11.700	25.000

Normal Force Coefficient, CN

Normal Force Coefficient, CN	Pitching Moment Coefficient (FWD C.G.), CLMFW
1.4	0.1
1.2	0.0
1.0	-0.1
0.8	-0.2
0.6	-0.3
0.4	-0.4
0.2	-0.5
0.0	-0.6
-0.2	-0.7
-0.4	-0.8
-0.6	-0.9

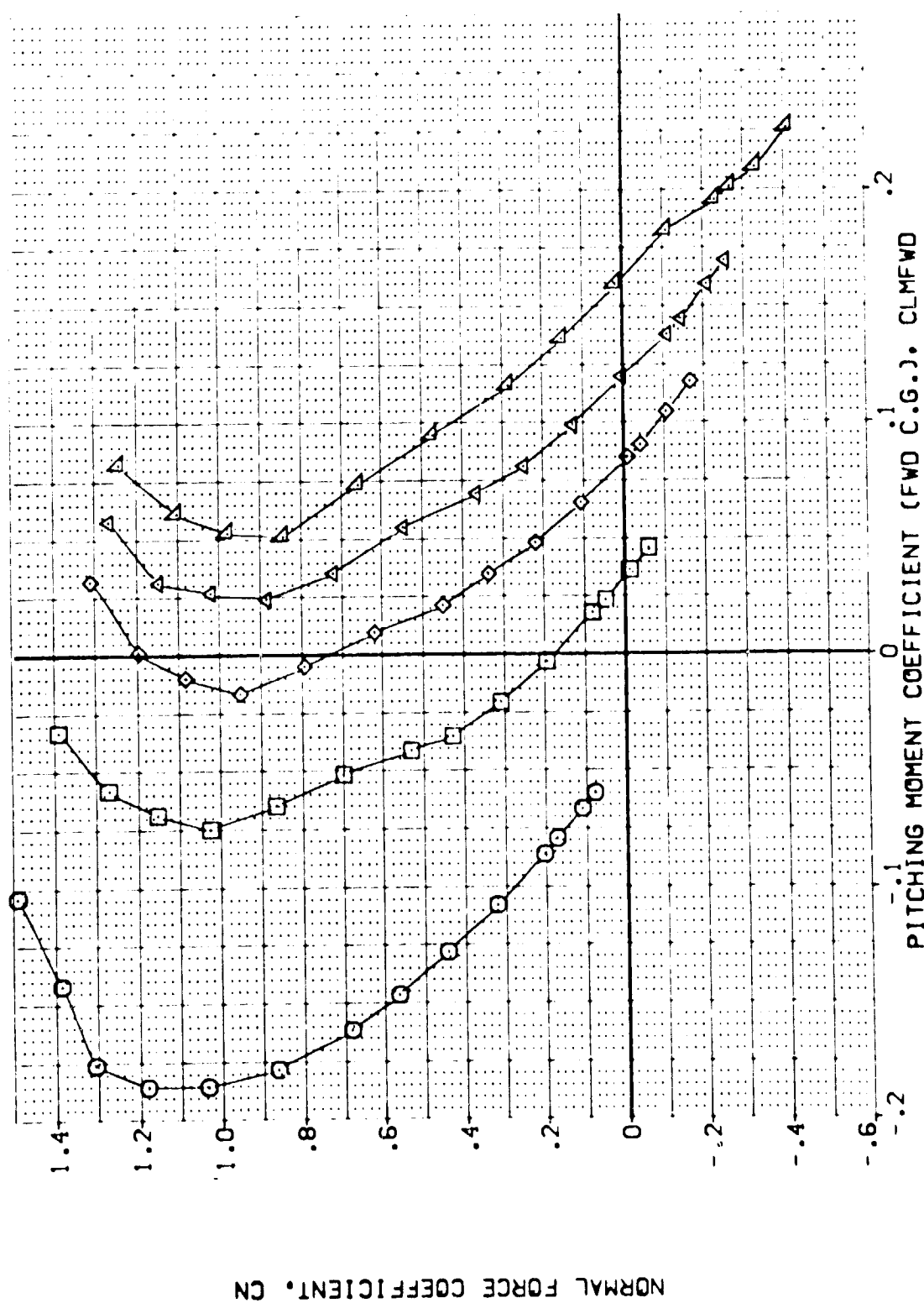


FIG. 7 ELEVON EFFECTS

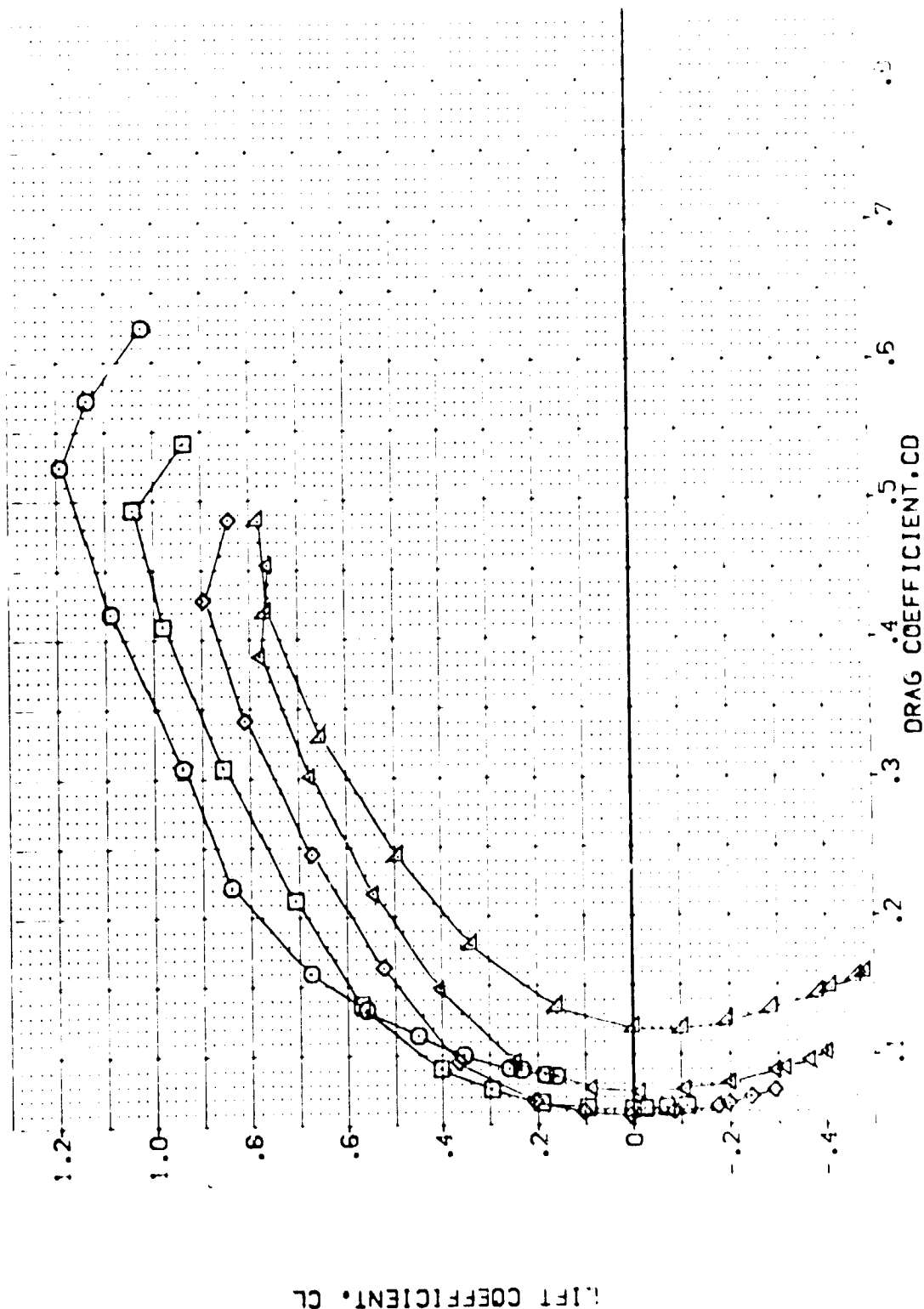
(E)MACH = 1.20



FIG. 7 ELEVON EFFECTS

(M)MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPOILER	REFERENCE INFORMATION
(TEJ003)	ARC 11-747 CASSA B C H F VI V	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(TEJ011)	ARC 11-747 CASSA B C H F VI V	10.000	.000	-11.700	25.000	SREF 14.2440
(TEJ002)	ARC 11-747 CASSA B C H F VI V	-10.000	.000	-11.700	25.000	SREF 28.1000
(TEJ013)	ARC 11-747 CASSA B C H F VI V	-20.000	.000	-11.700	25.000	SREF 32.3010
(TEJ023)	ARC 11-747 CASSA B C H F VI V	-40.000	.000	-11.700	25.000	SREF 11.2000
						SCALE .0300



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DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NO.	RV/L	ELEVON	AILERON	BO/LAP	SPDBRK	REFERENCE INFORMATION
{TEJ003}	ARC 11-747 0A53A B C M F VI	V	RV/L	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
{TEJ011}	ARC 11-747 0A53A B C M F VI	V	RV/L	15.000	.000	-11.700	25.000	LREF 14.2440
{TEJ002}	ARC 11-747 0A53A B C M F VI	V	RV/L	-10.000	.000	-11.700	25.000	SREF 28.1004
{TEJ019}	ARC 11-747 0A53A B C M F VI	V	RV/L	-10.000	.000	-11.700	25.000	XMRP 32.3010
{TEJ023}	ARC 11-747 0A53A B C M F VI	V	RV/L	-40.000	.000	-11.700	25.000	ZMRP 11.2500
								SCALE .0300

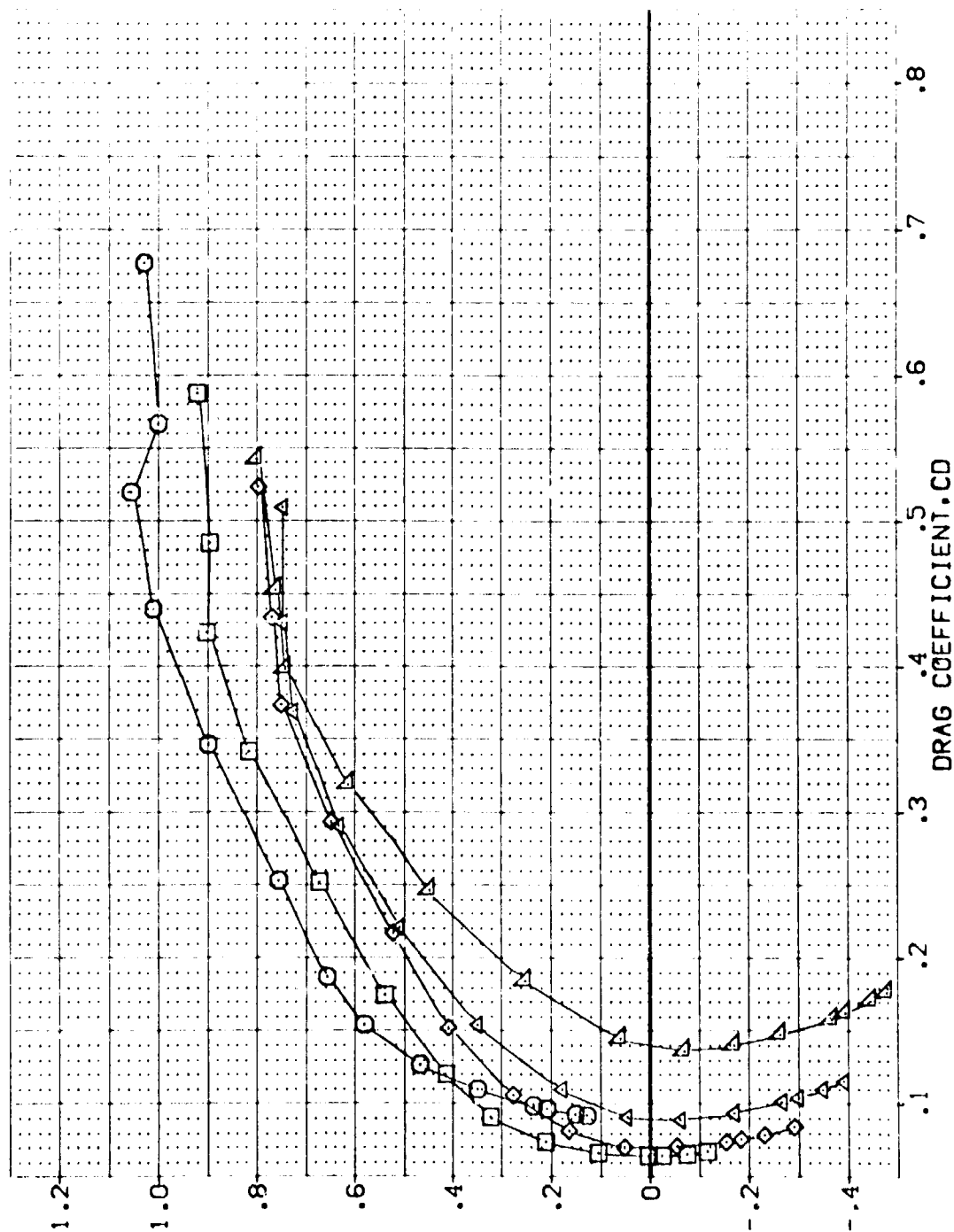


FIG. 7 ELEVON EFFECTS  
(B)MACH = .80



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NOTES	ELEVON	AILERON	BOFLAP	SPOILER	REFERENCE INFORMATION
[TEJ003]	ARC 11-747 DAS3A B C M F VI	V	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[TEJ001]	ARC 11-747 DAS3A B C M F VI	V	.000	.000	-11.700	25.000	LREF 14.2440 IN.
[TEJ002]	ARC 11-747 DAS3A B C M F VI	V	-10.000	.000	-11.700	25.000	BREF 28.1004 IN.
[TEJ019]	ARC 11-747 DAS3A B C M F VI	V	-20.000	.000	-11.700	25.000	YMRP 32.3010 IN.
[TEJ023]	ARC 11-747 DAS3A B C M F VI	V	-40.000	.000	-11.700	25.000	ZMRP .0000 IN.
							SCALE 11.2500

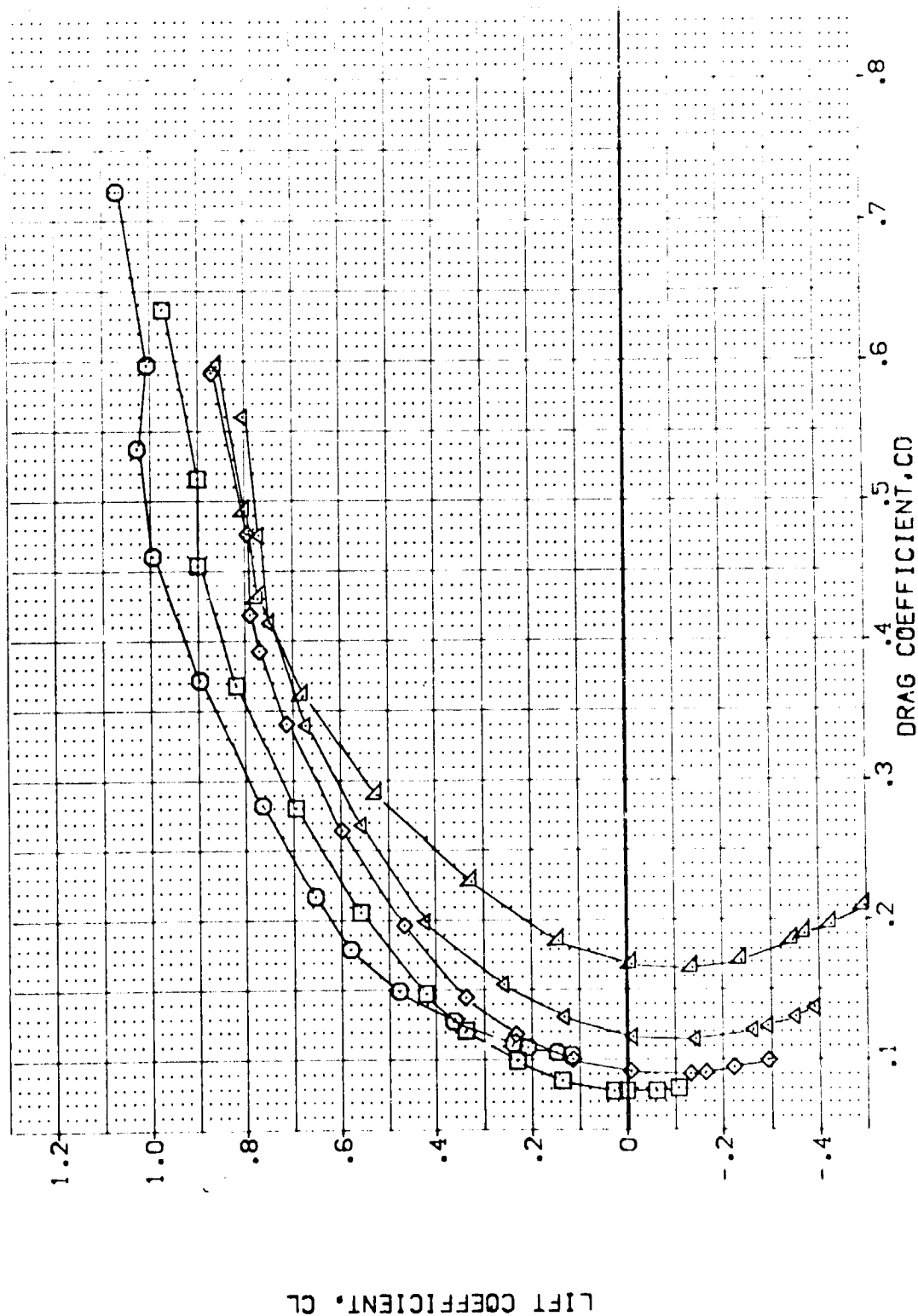


FIG. 7 ELEVON EFFECTS

(CD)MACH = .90



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NOM.	RV/L	ELEVON	AILERON	BOFLAP	SPOBRK	REFERENCE INFORMATION
{TEJ003}	ARC 11-747 DA53A B C M F V1 V	NOM.	RV/L	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
{TEJ011}	ARC 11-747 DA53A B C M F V1 V	NOM.	RV/L	.000	.000	-11.700	25.000	LREF 14.2440 IN.
{TEJ002}	ARC 11-747 DA53A B C M F V1 V	NOM.	RV/L	-10.000	.000	-11.700	25.000	BREF 28.1004 IN.
{TEJ019}	ARC 11-747 DA53A B C M F V1 V	NOM.	RV/L	-20.000	.000	-11.700	25.000	XMRP .0000 IN.
{TEJ023}	ARC 11-747 DA53A B C M F V1 V	NOM.	RV/L	-40.000	.000	-11.700	25.000	YMRP .0000 IN.
								ZMRP 11.2500 IN.
								SCALE .0300

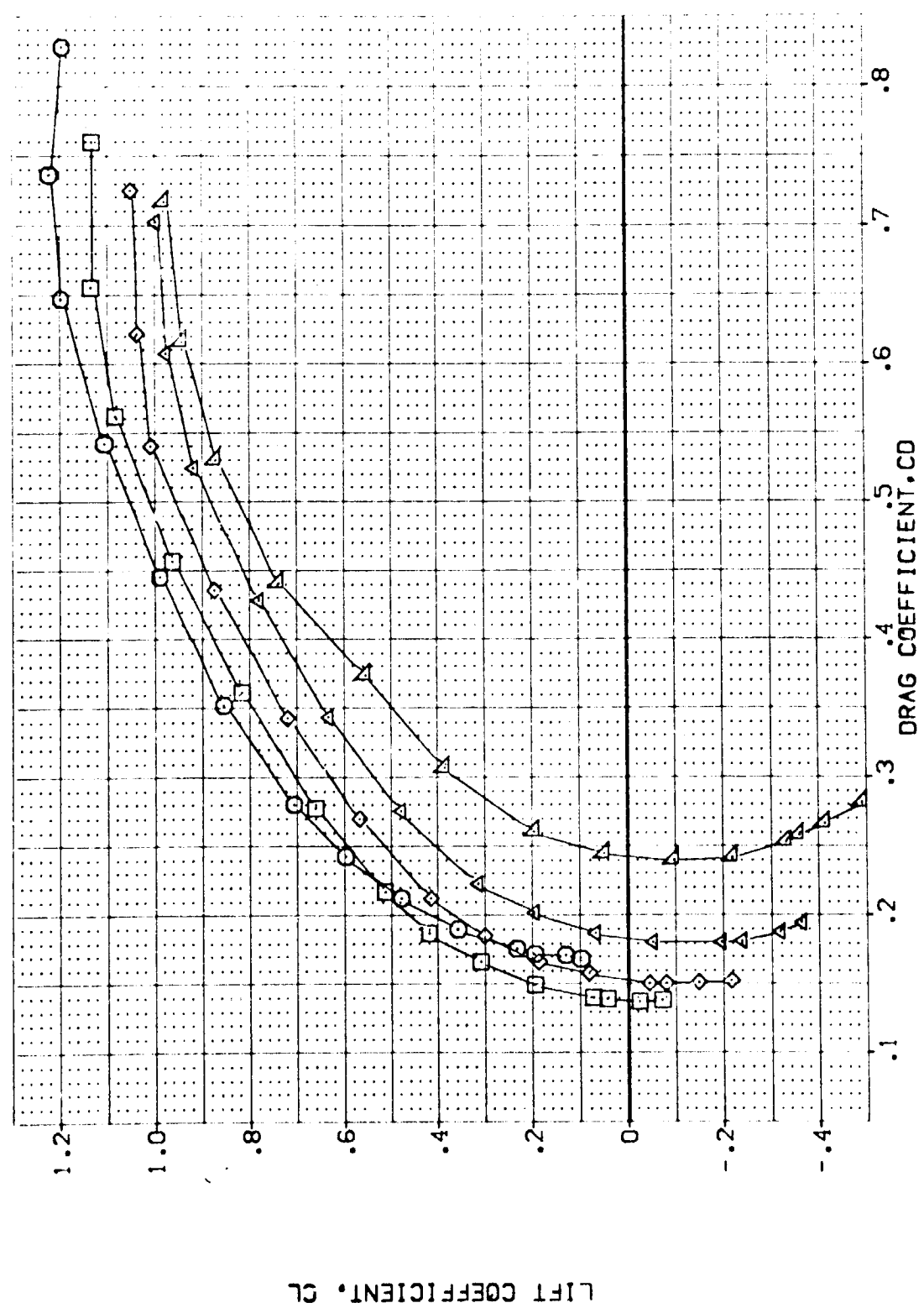


FIG. 7 ELEVON EFFECTS  
(M)MACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NO.	RV/L	ELEVON	AILERON	BOFLAP	SPORARK	REFERENCE INFORMATION
[TEJ003]	ARC 11-747 GA53A B C M F VI V	NO.	RV/L	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[TEJ011]	ARC 11-747 GA53A B C M F VI V	NO.	RV/L	.000	.000	-11.700	25.000	LREF 14.2440 N.
[TEJ002]	ARC 11-747 GA53A B C M F VI V	NO.	RV/L	-10.000	.000	-11.700	25.000	BREF 28.1004 N.
[TEJ019]	ARC 11-747 GA53A B C M F VI V	NO.	RV/L	-20.000	.000	-11.700	25.000	XMRP 32.3010 N.
[TEJ023]	ARC 11-747 GA53A B C M F VI V	NO.	RV/L	-40.000	.000	-11.700	25.000	ZMRP 11.2500 N.
								SCALE .0300

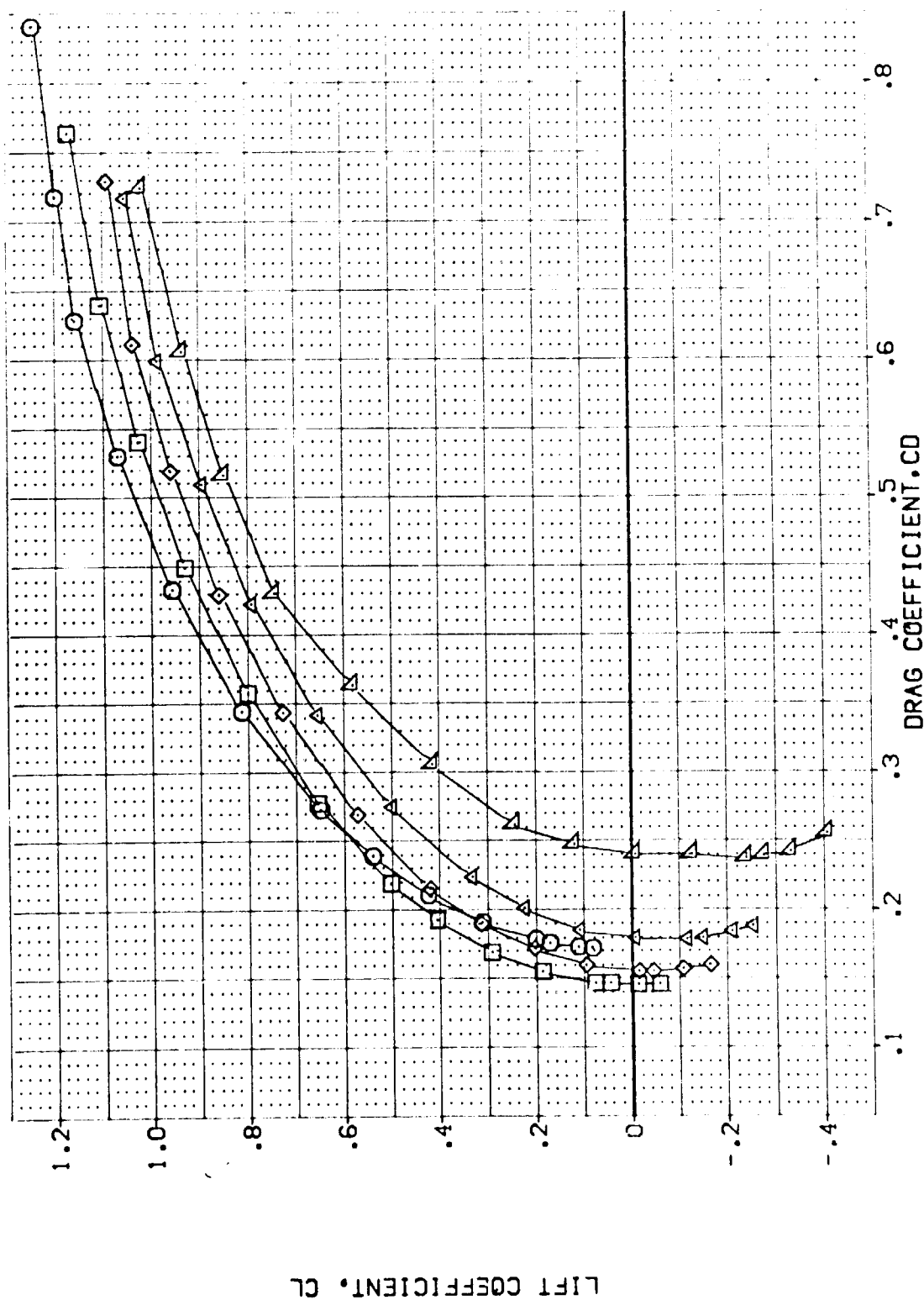


FIG. 7 ELEVON EFFECTS

(M)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NOTES	RV/L	ELEVON	AILERON	BOFLAP	SPDRK	REFERENCE INFORMATION
{TEJ003}	ARC 11-747 DAS3A B C H F V	V	RV/L	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
{TEJ011}	ARC 11-747 DAS3A B C H F V	V	RV/L	15.000	.000	-11.700	25.000	LREF 14.2440 IN.
{TEJ002}	ARC 11-747 DAS3A B C H F V	V	RV/L	-10.000	.000	-11.700	25.000	BREF 28.1004 IN.
{TEJ019}	ARC 11-747 DAS3A B C H F V	V	RV/L	-20.000	.000	-11.700	25.000	XMRP 32.3010 IN.
{TEJ023}	ARC 11-747 DAS3A B C H F V	V	RV/L	-40.000	.000	-11.700	25.000	YMRP 11.2500 IN.
								ZMRP .0300 IN.
								SCALE

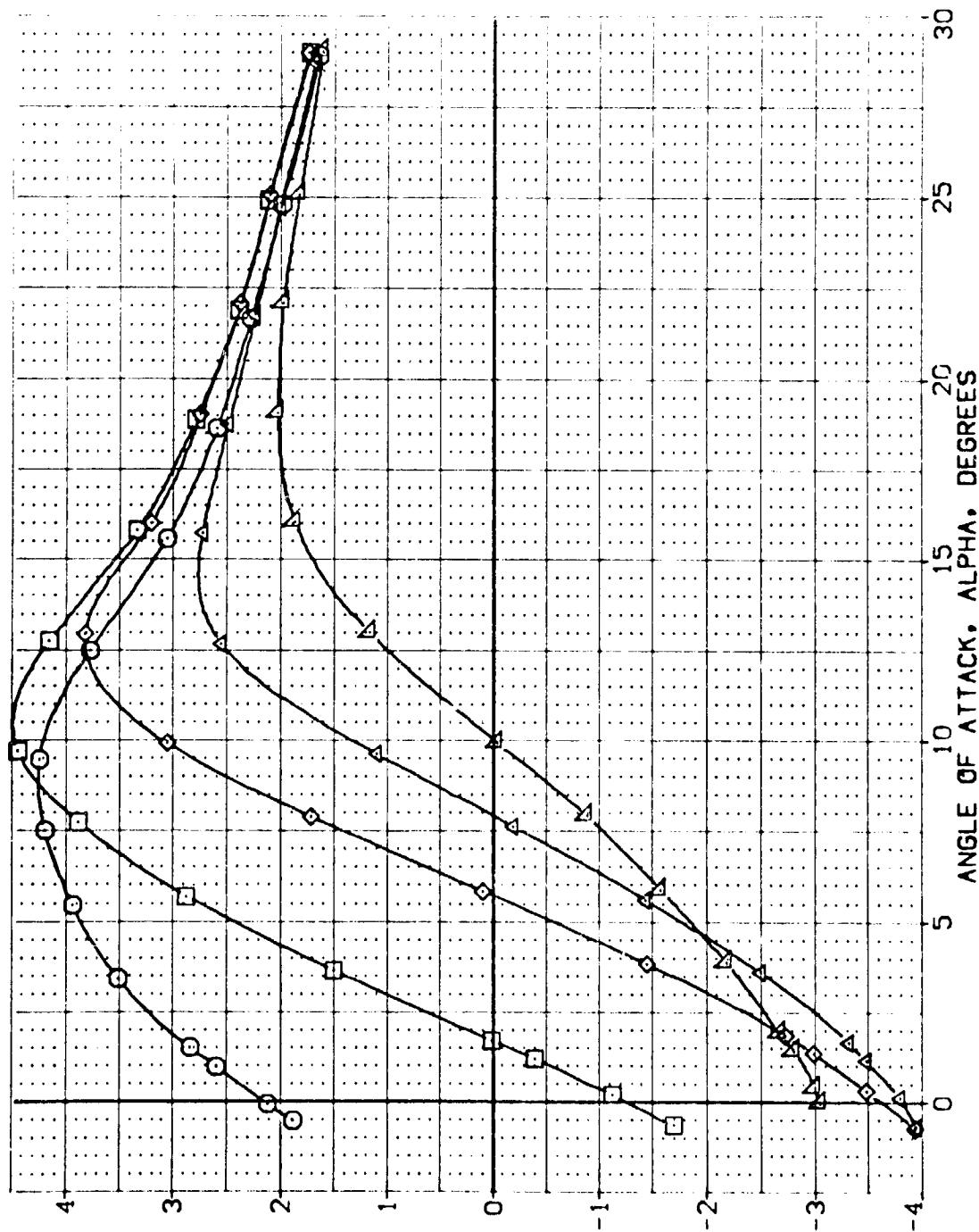


FIG. 7 ELEVON EFFECTS

(A)MACH = .60

DATA SET SYMBO.	CONFIGURATION DESCRIPTION	NDM	RV/L	ELEVON	AIRLON	BOFLAP	SPDRBK	REFERENCE INFORMATION
(TEJ003)	ARC 11-747 GA53A B C H F VI	V	NDM	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(TEJ011)	ARC 11-747 GA53A B C H F VI	V	NDM	.000	.000	-11.700	25.000	LREF 14.2440 IN.
(TEJ002)	ARC 11-747 GA53A B C H F VI	V	NDM	-10.000	.000	-11.700	25.000	BREF 28.1004 IN.
(TEJ019)	ARC 11-747 GA53A B C H F VI	V	NDM	-20.000	.000	-11.700	25.000	XMRP 32.3010 IN.
(TEJ023)	ARC 11-747 GA53A B C H F VI	V	NDM	-40.000	.000	-11.700	25.000	YMRP 11.2500 IN.
								SCALE .0300

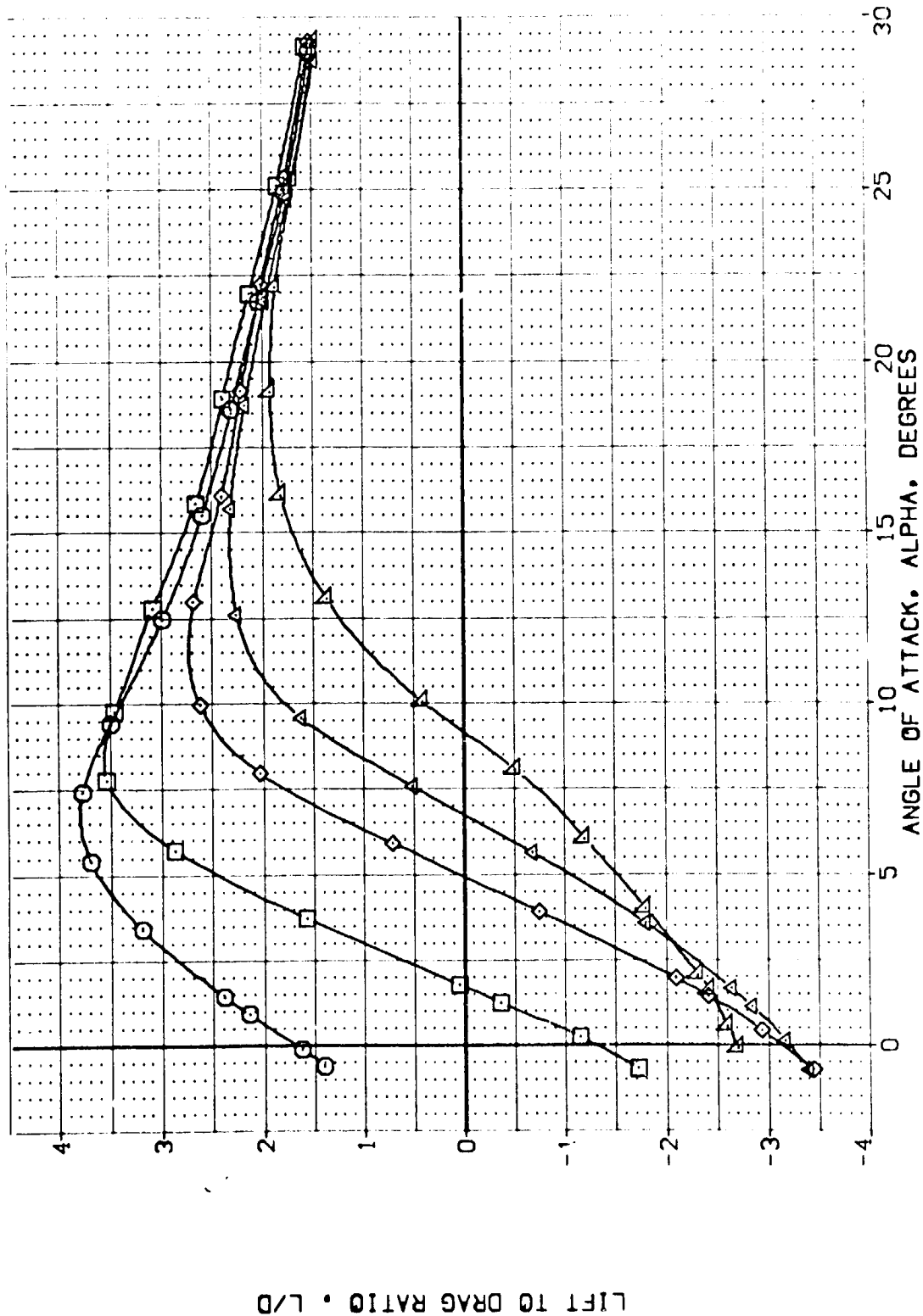


FIG. 7 ELEVON EFFECTS

(B)MACH = .80



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NON	RV/L	ELEVON	AILERON	BOFLAP	SPDBRK	REFERENCE INFORMATION
{TE4003}	ARC 11-747 DAS3A B C M F VI	V	RV/L	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
{TE4011}	ARC 11-747 DAS3A B C M F VI	V	RV/L	.000	.000	-11.700	25.000	LREF 14.2440 IN.
{TE4002}	ARC 11-747 DAS3A B C M F VI	V	RV/L	-10.000	.000	-11.700	25.000	XREF 28.1004 IN.
{TE4019}	ARC 11-747 DAS3A B C M F VI	V	RV/L	-20.000	.000	-11.700	25.000	YMRP 32.3010 IN.
{TE4023}	ARC 11-747 DAS3A B C M F VI	V	RV/L	-40.000	.000	-11.700	25.000	ZMRP 11.2500 IN.
								SCALE .0300

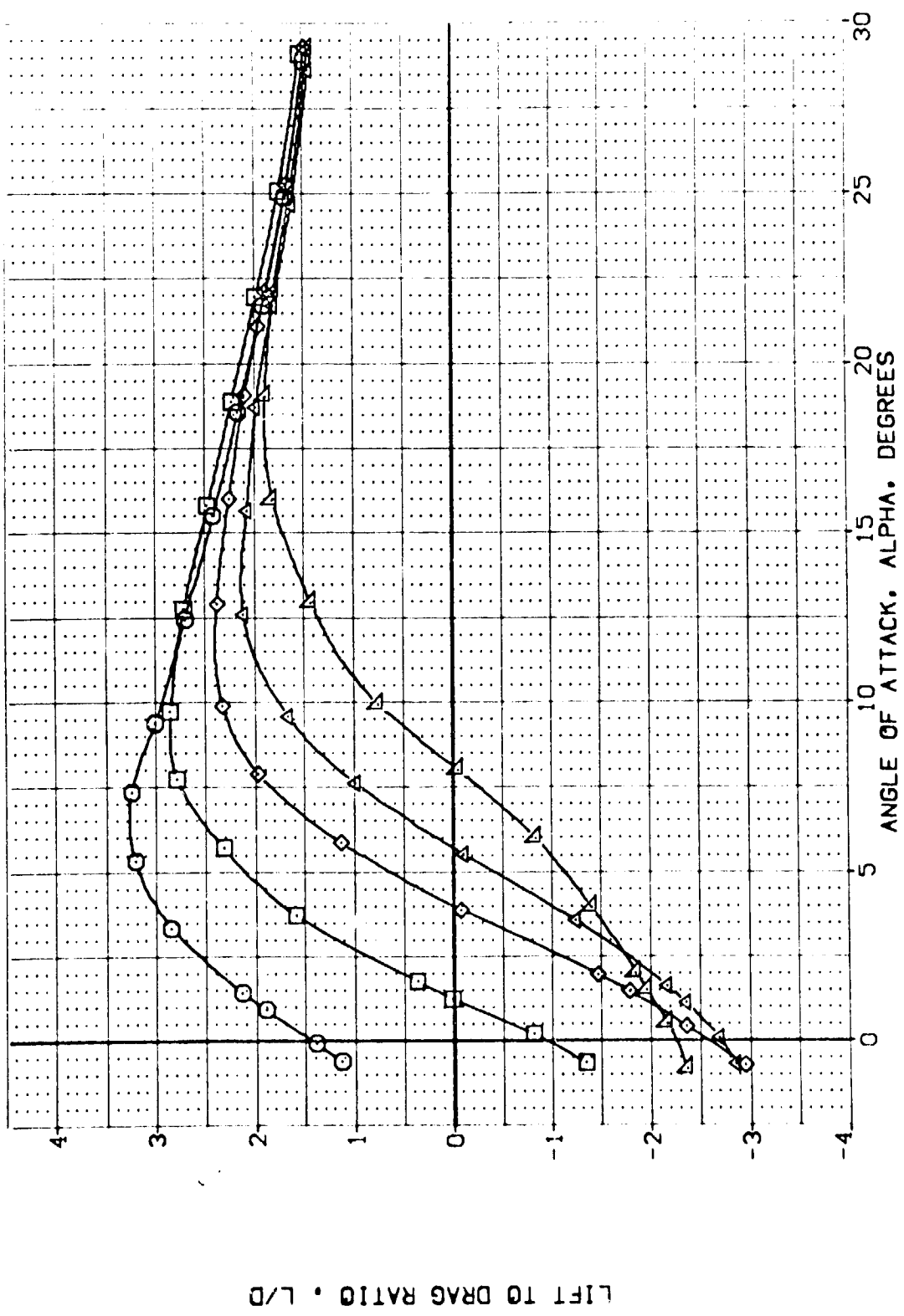


FIG. 7 ELEVON EFFECTS

(C)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NOT	RV/L	ELEVON	AILERON	BOG LAP	SPDRBK	REFERENCE INFORMATION
(TEJ003)	ARC 11-747 OAS3A B C H F VI	V	RV/L	15.000	.000	-11.700	25.000	SREF 2.4210 50. FT.
(TEJ011)	ARC 11-747 OAS3A B C H F VI	V	RV/L	.000	.000	-11.700	25.000	LREF 14.2440 IN.
(TEJ002)	ARC 11-747 OAS3A B C H F VI	V	RV/L	-10.000	.000	-11.700	25.000	BREF 28.1004 IN.
(TEJ019)	ARC 11-747 OAS3A B C H F VI	V	RV/L	-20.000	.000	-11.700	25.000	XMPP 32.3010 IN.
(TEJ023)	ARC 11-747 OAS3A B C H F VI	V	RV/L	-40.000	.000	-11.700	25.000	ZMPP 11.2500 IN.
								SCALE .0300

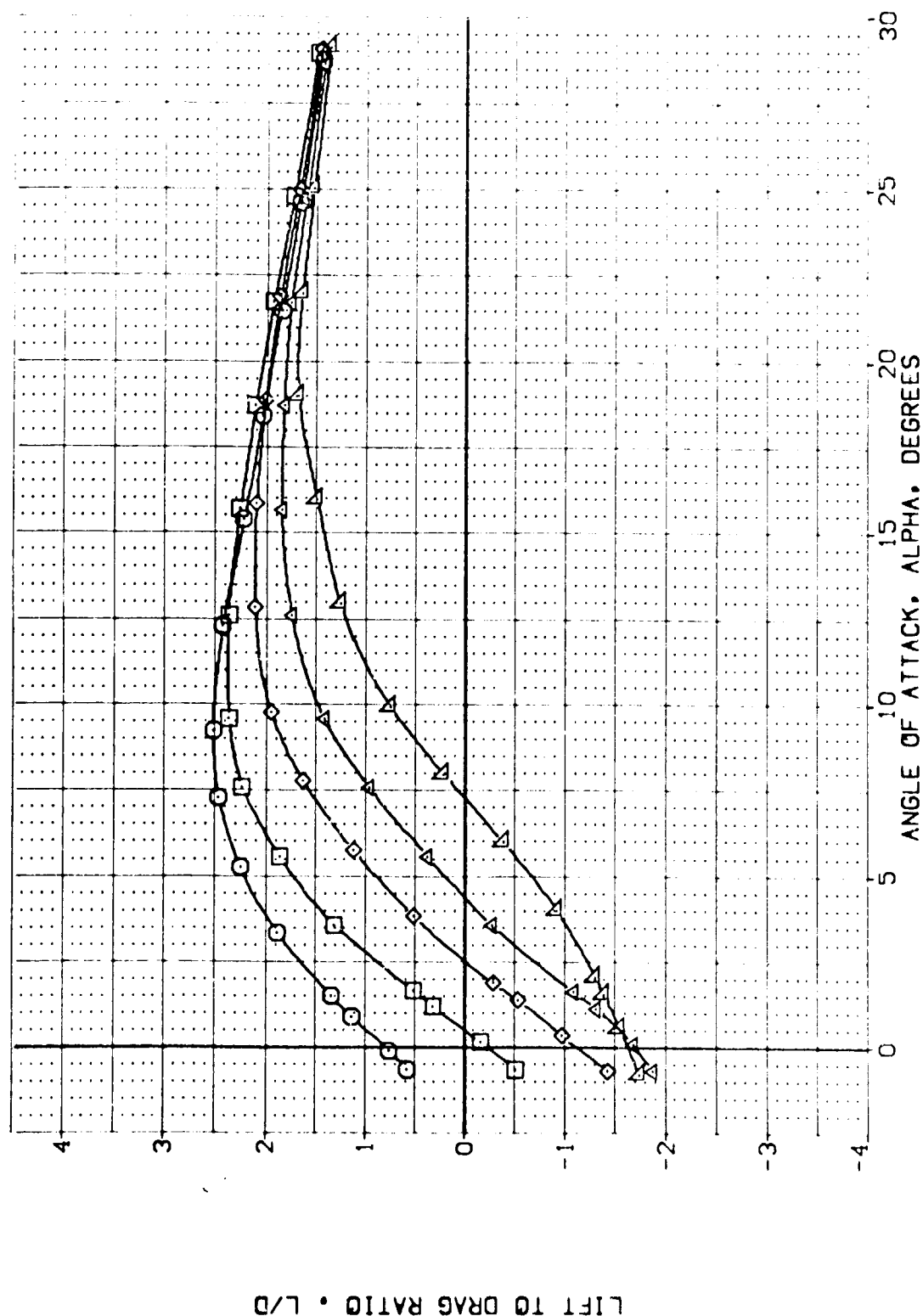


FIG. 7 ELEVON EFFECTS

(O)MACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	REF. INFO	SCALE
[TEJ003]	ARC 11-747 QAS3A B C M F VI V	SREF 2.4210	SC.FT.
[TEJ011]	ARC 11-747 QAS3A B C M F VI V	REF 14.2440	IN.
[TEJ002]	ARC 11-747 QAS3A B C M F VI V	SREF 28.1004	IN.
[TEJ019]	ARC 11-747 QAS3A B C M F VI V	XREF 32.3010	IN.
[TEJ023]	ARC 11-747 QAS3A B C M F VI V	YREF 11.2500	IN.
		ZREF 0.0000	IN.
		SCALE 0.0000	SCALE

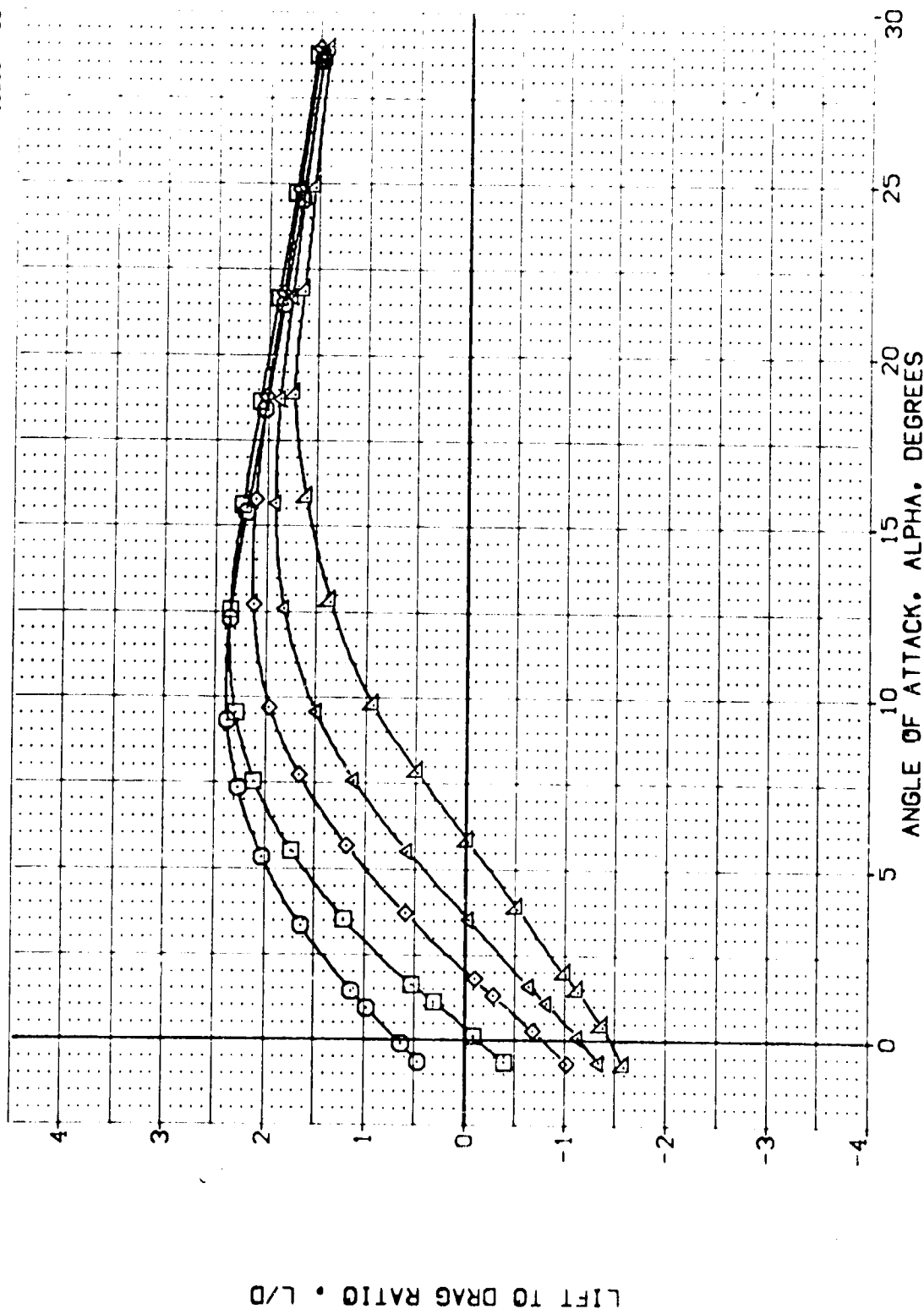


FIG. 7 ELEVON EFFECTS

(E)MACH = 1.20





FIG. 7 ELEVON EFFECTS  
C/MACH = .60

LONGITUDINAL CENTER OF PRESSURE/BODY LENGTH, XCP/L

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RU/L	AILRON	BDF LAP	SPDRBK	REFERENCE INFORMATION
[AEJ003]	ARC 11-747 CAS3A B	0.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[AEJ011]	ARC 11-747 CAS3A B	0.000	.000	-11.700	25.000	LREF 14.2410
[AEJ007]	ARC 10-747 CAS3A B	0.000	.000	-11.700	25.000	BREF 28.1004
[AEJ019]	ARC 10-747 CAS3A B	0.000	.000	-11.700	25.000	XMRP 32.3010
[AEJ023]	ARC 10-747 CAS3A B	0.000	.000	-11.700	25.000	ZMRP 11.2500
						SCALE .0300

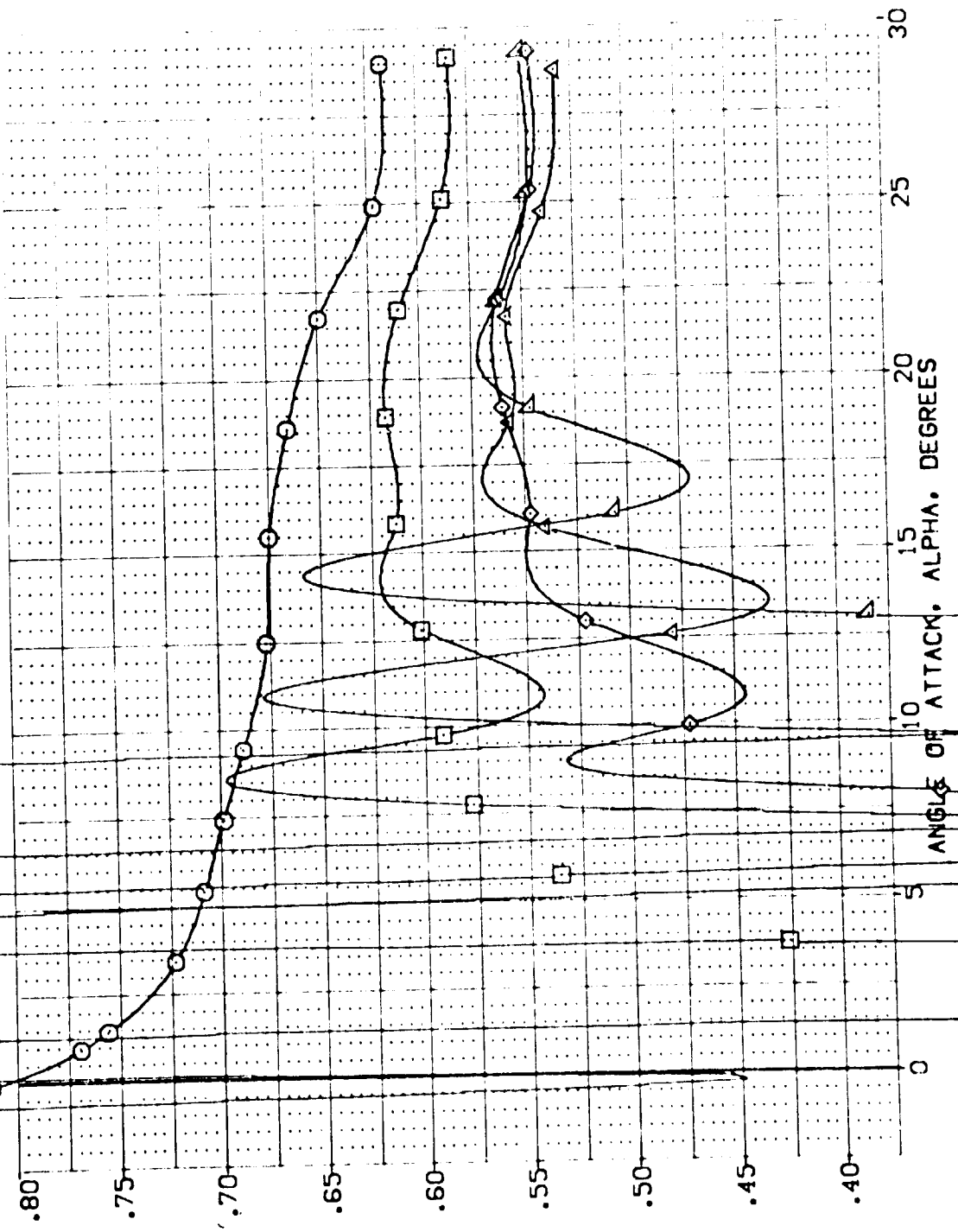


FIG. 7 ELEVON EFFECTS  
(B)MACH = .80

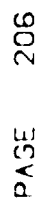


FIG. 7. ELEVEN EFFECTS

$$(C)_{MACH} = .90$$

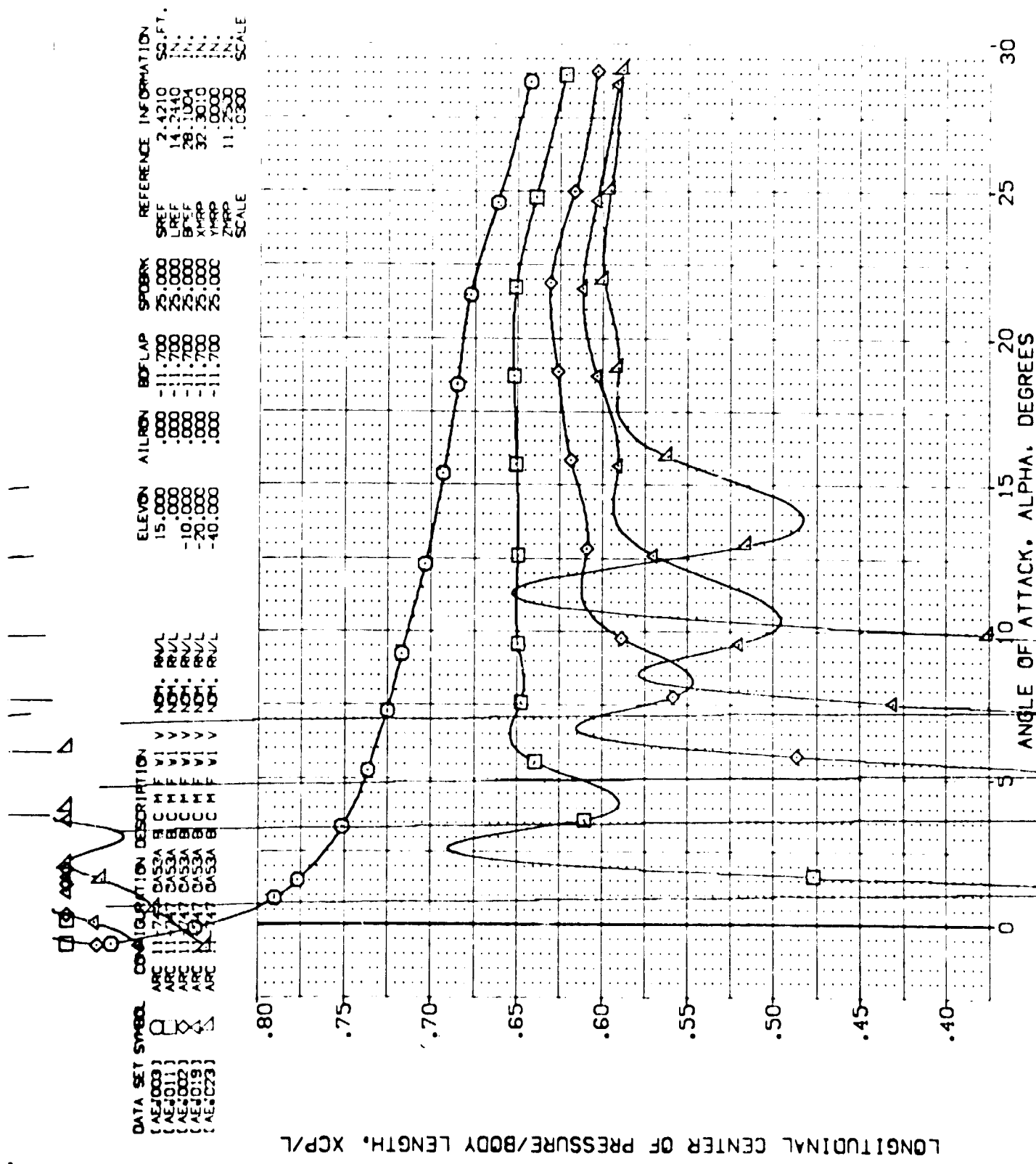


FIG. 7 ELEVON EFFECTS

(C)MACH = 1.05

DATA SET SYMBOL	CONFIDENTIALITY	DESCRIPTION	NON-REF	ELEVON	AIRLON	BOFLAP	SPDRK	REFERENCE INFORMATION
(AEJ003)	ARC	11-71	CA53A B C M F VI	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(AEJ011)	ARC	11-71	CA53A B C M F VI	10.000	.000	-11.700	25.000	LREF 14.2440
(AEJ002)	ARC	11-71	CA53A B C M F VI	-10.000	.000	-11.700	25.000	BREF 28.1004
(AEJ019)	ARC	11-71	CA53A B C M F VI	-20.000	.000	-11.700	25.000	XMRP 32.3010
(AEJ023)	ARC	11-71	CA53A B C M F VI	-40.000	.000	-11.700	25.000	YMRP .0000
								ZMRP 11.2500
								SCALE .0300

LONGITUDINAL CENTER OF PRESSURE/BODY LENGTH, XCP/L

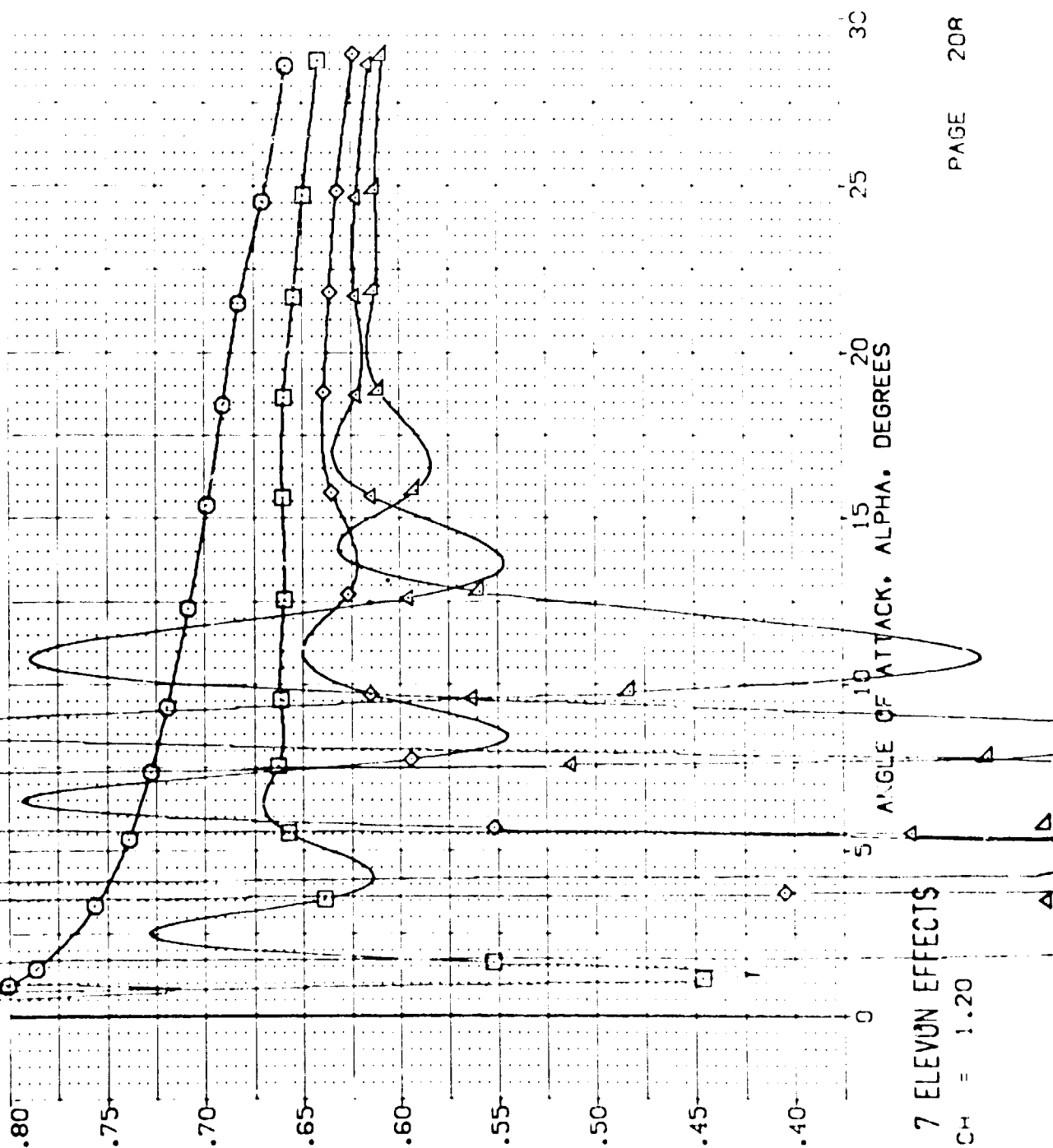


FIG. 7 ELEVON EFFECTS  
(F)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DE	AILRON	BDF LAP	SPDRBK	REFERENCE INFORMATION			
(VEJ003)	ARC 11-747 DA53A B C M F V1 V	15.000	.000	-11.700	25.000	SREF	2.4210	50. FT.	
(VEJ002)	ARC 11-747 DA53A B C M F V1 V	-10.000	.000	-11.700	25.000	LREF	14.2440	IN.	
(VEJ019)	ARC 11-747 DA53A B C M F V1 V	-20.000	.000	-11.700	25.000	BREF	28.1004	IN.	
(VEJ023)	ARC 11-747 DA53A B C M F V1 V	-40.000	.000	-11.700	25.000	XMRP	32.3010	IN.	
						YMRP	.0000	IN.	
						ZMRP	11.2500	IN.	
						SCALE	.0300	SCALE	

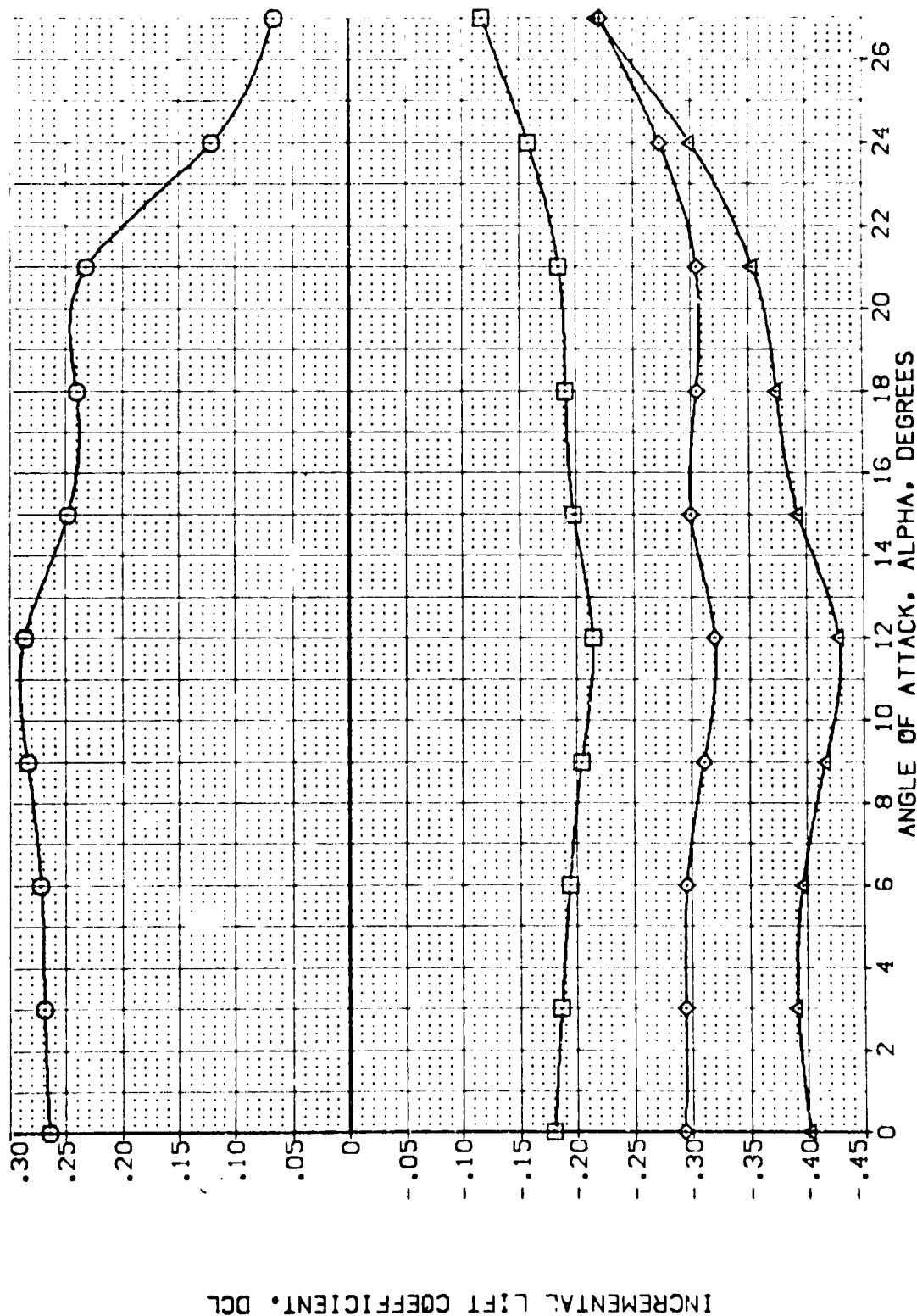


FIG. 7 ELEVON EFFECTS

(A) MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DE	AILRON	BDF LAP	SPOBRK	REFERENCE INFORMATION
(VE4003)	ARC 11-747 DA53A B C M F VI V	15.000	.000	-11.700	25.000	SREF 2.4210 SC.F.T.
(VE4002)	ARC 11-747 DA53A B C M F VI V	-10.000	.000	-11.700	25.000	LBFF 14.2440
(VE4019)	ARC 11-747 DA53A B C M F VI V	-20.000	.000	-11.700	25.000	BRFF 78.1004
(VE4023)	ARC 11-747 DA53A B C M F VI V	-40.000	.000	-11.700	25.000	XMRP 12.3010
						YMRP .0000
						ZMRP .1.2500
						SCALE .0300

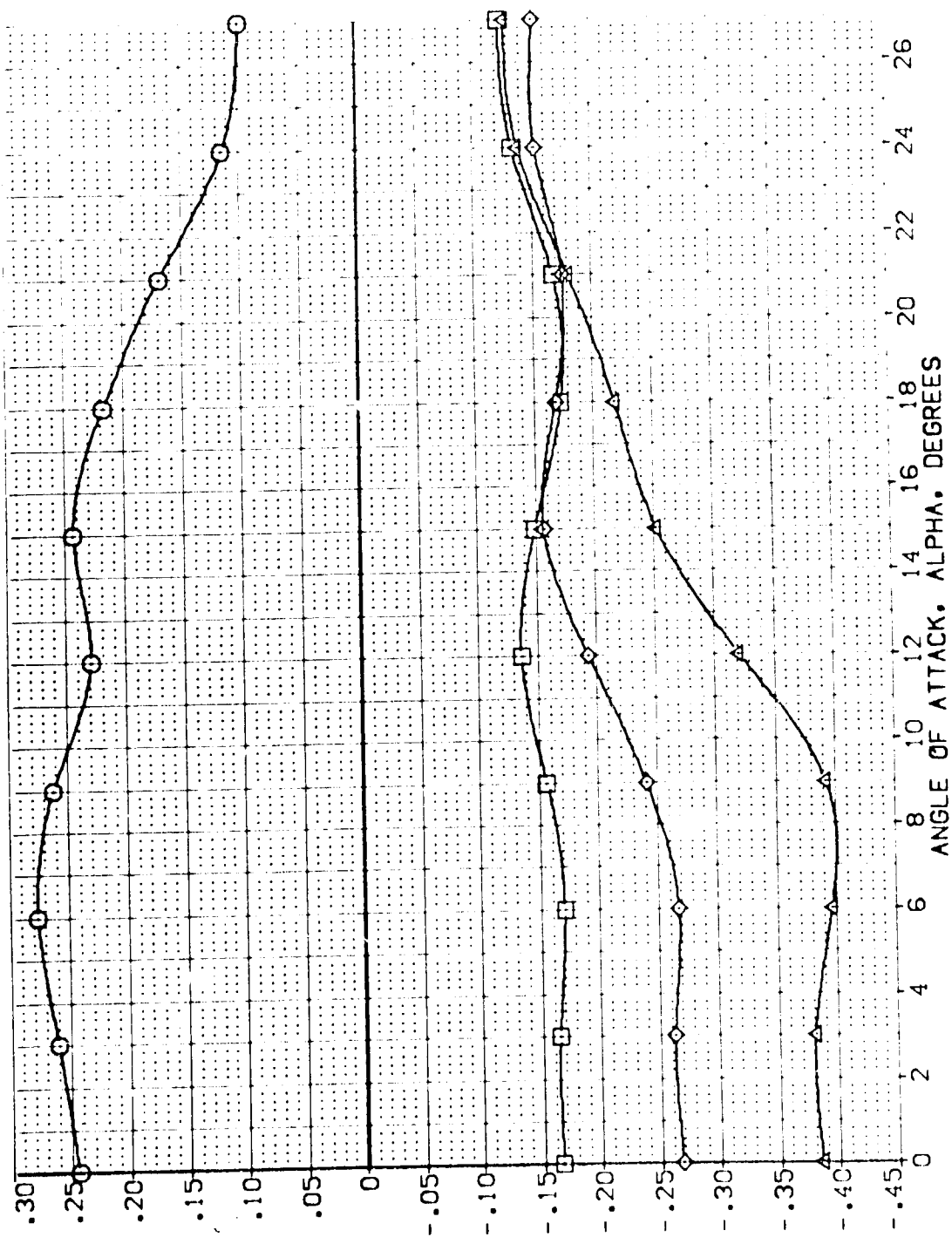


FIG. 7 ELEVON EFFECTS  
(B) MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DE	AIRLON	BOFLAP	SPOBRK	REFERENCE INFORMATION
(VE4003)	ARC 11-747 BA53A B C M F VI V	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(VE4002)	ARC 11-747 BA53A B C M F VI V	-10.000	.000	-11.700	25.000	LREF 14.2410 IN.
(VE4019)	ARC 11-747 BA53A B C M F VI V	-20.000	.000	-11.700	25.000	BREF 28.1004 IN.
(VE4023)	ARC 11-747 BA53A B C M F VI V	-40.000	.000	-11.700	25.000	XMRP 32.3010 IN.
						ZMRP .0000 IN.
						SCALE 11.2500 IN.
						SCALE .0300

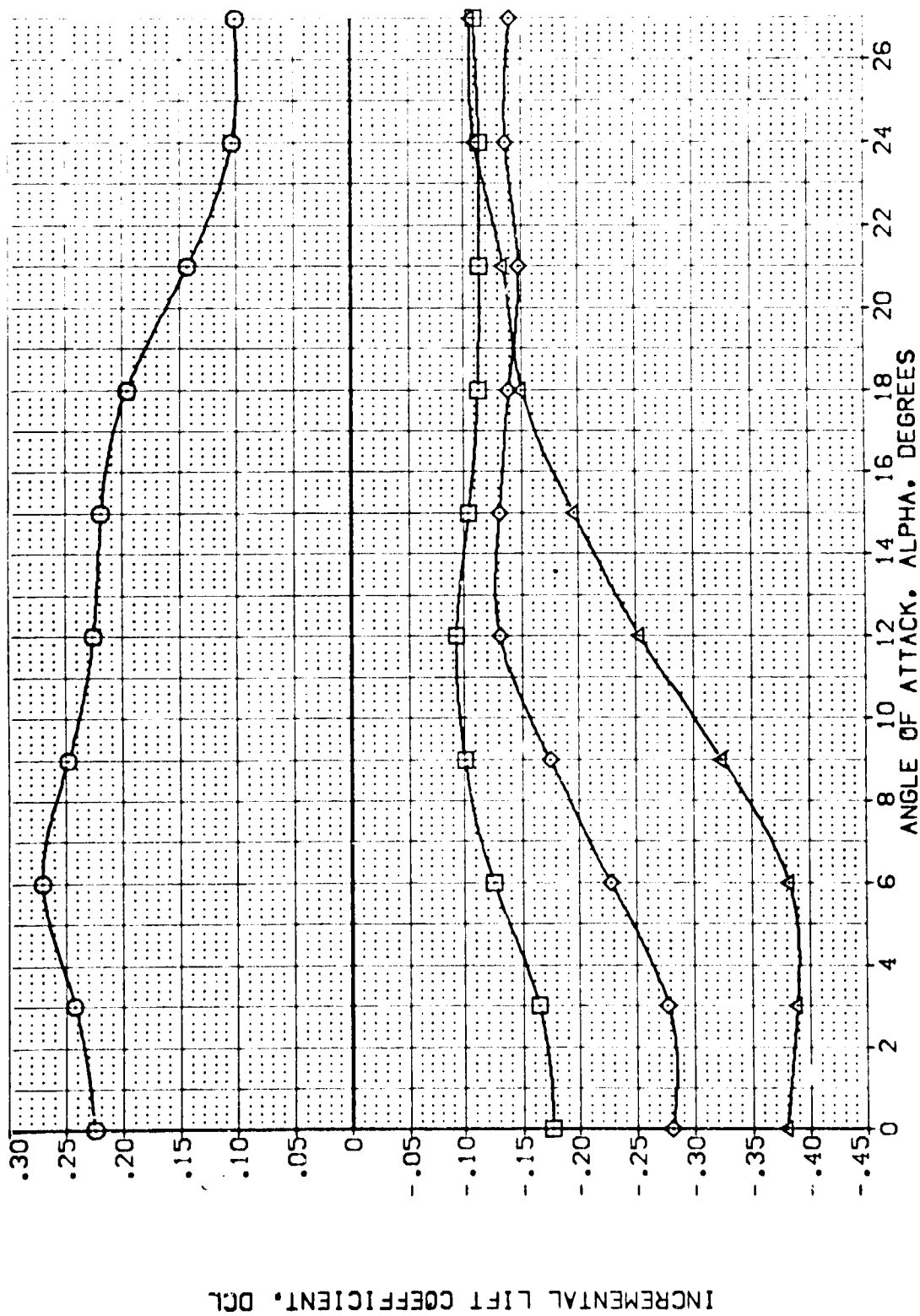


FIG. 7 ELEVON EFFECTS

(C)MACH = .90



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DE	ATLRON	BOFLAP	SPDRK	REFERENCE INFORMATION	
[VE4003]	ARC 11-747 BA53A B C M F VI V	15.000	.000	-11.700	25.000	SREF	2.4210 SQ.FT.
[VE4002]	ARC 11-747 BA53A B C M F VI V	-10.000	.000	-11.700	25.000	LREF	14.2440 IN.
[VE4019]	ARC 11-747 BA53A B C M F VI V	-20.000	.000	-11.700	25.000	BREF	28.1004 IN.
[VE4023]	ARC 11-747 BA53A B C M F VI V	-40.000	.000	-11.700	25.000	XMRP	32.3010 IN.
						YMRP	11.2500 IN.
						ZMRP	.0300 IN.
						SCALE	

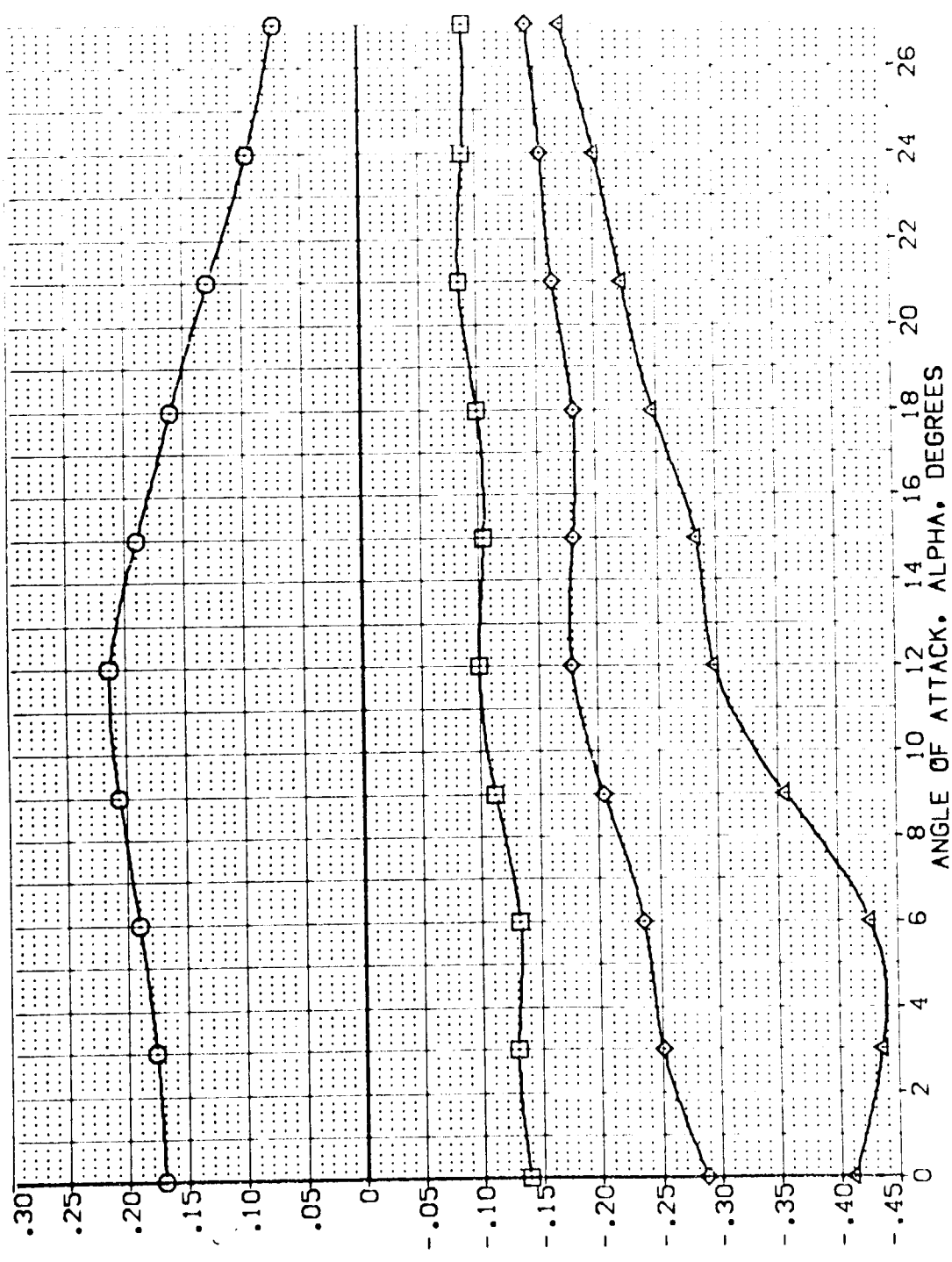


FIG. 7 ELEVON EFFECTS

(D)MACH = 1.05



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DE	AILERON	BOFLAP	SPDRBK	REFERENCE INFORMATION
(VEJ003)	ARC 11-747 0A53A B C M F V1 V	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(VEJ002)	ARC 11-747 0A53A B C M F V1 V	-10.000	.000	-11.700	25.000	LREF 14.2440 IN.
(VEJ019)	ARC 11-747 0A53A B C M F V1 V	-20.000	.000	-11.700	25.000	BREF 28.1004 IN.
(VEJ023)	ARC 11-747 0A53A B C M F V1 V	-40.000	.000	-11.700	25.000	XMRP 32.3010 IN.
						YMRP 0.000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

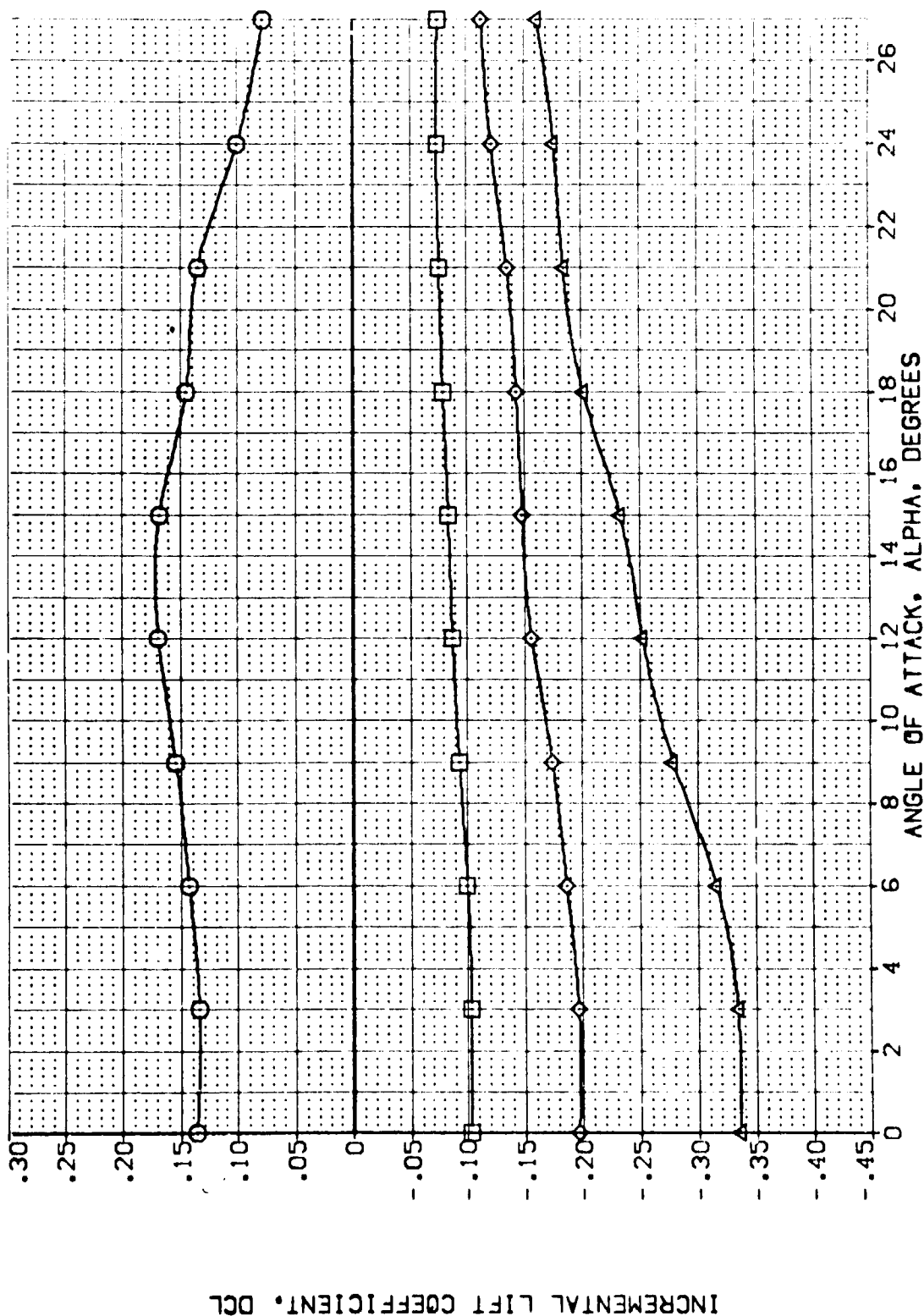


FIG. 7 ELEVON EFFECTS

(E)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DE	AILRON	BD FLAP	SPDRBK	REFERENCE INFORMATION	
[VEJ003]	ARC 11-747 DAS3A B C M F VI V	15.000	.000	-11.700	25.000	SREF	2.4210 SQ.FT.
[VEJ002]	ARC 11-747 DAS3A B C M F VI V	-10.000	.000	-11.700	25.000	LREF	14.2440 IN.
[VEJ019]	ARC 11-747 DAS3A B C M F VI V	-20.000	.000	-11.700	25.000	BREF	28.1004 IN.
[VEJ023]	ARC 11-747 DAS3A B C M F VI V	-40.000	.000	-11.700	25.000	XMRP	32.3010 IN.
						YMRP	.0000 IN.
						ZMRP	11.2500 IN.
						SCALE	.0300

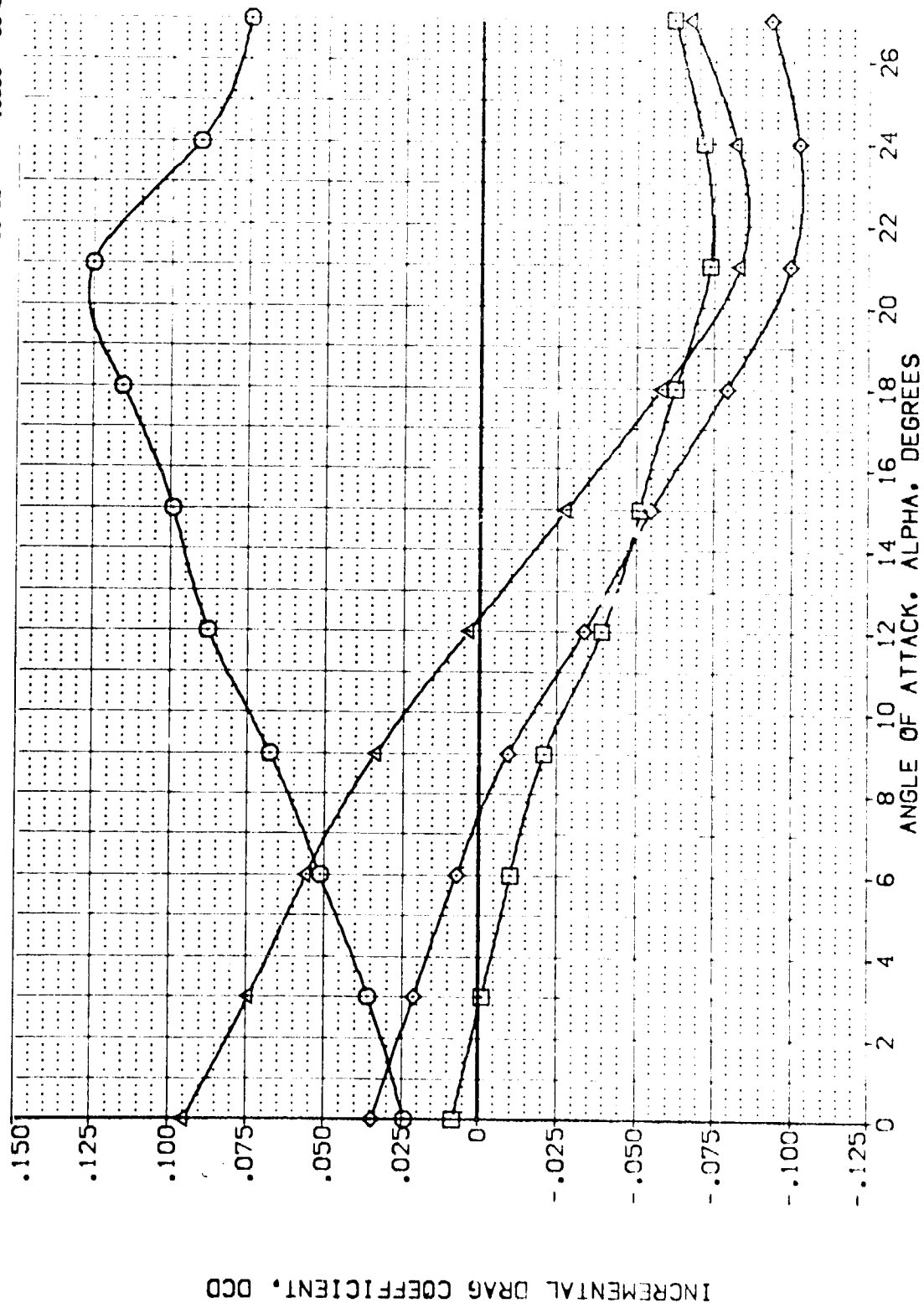


FIG. 7 ELEVON EFFECTS

(A) MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DE	AILRON	BOFLAP	SPOBRK	REFERENCE INFORMATION
(VEJ003)	ARC 11-747 OAS3A B C M F VI V	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(VEJ002)	ARC 11-747 OAS3A B C M F VI V	-10.000	.000	-11.700	25.000	LREF 14.2440 IN.
(VEJ019)	ARC 11-747 OAS3A B C M F VI V	-20.000	.000	-11.700	25.000	BREF 28.1004 IN.
(VEJ023)	ARC 11-747 OAS3A B C M F VI V	-40.000	.000	-11.700	25.000	XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

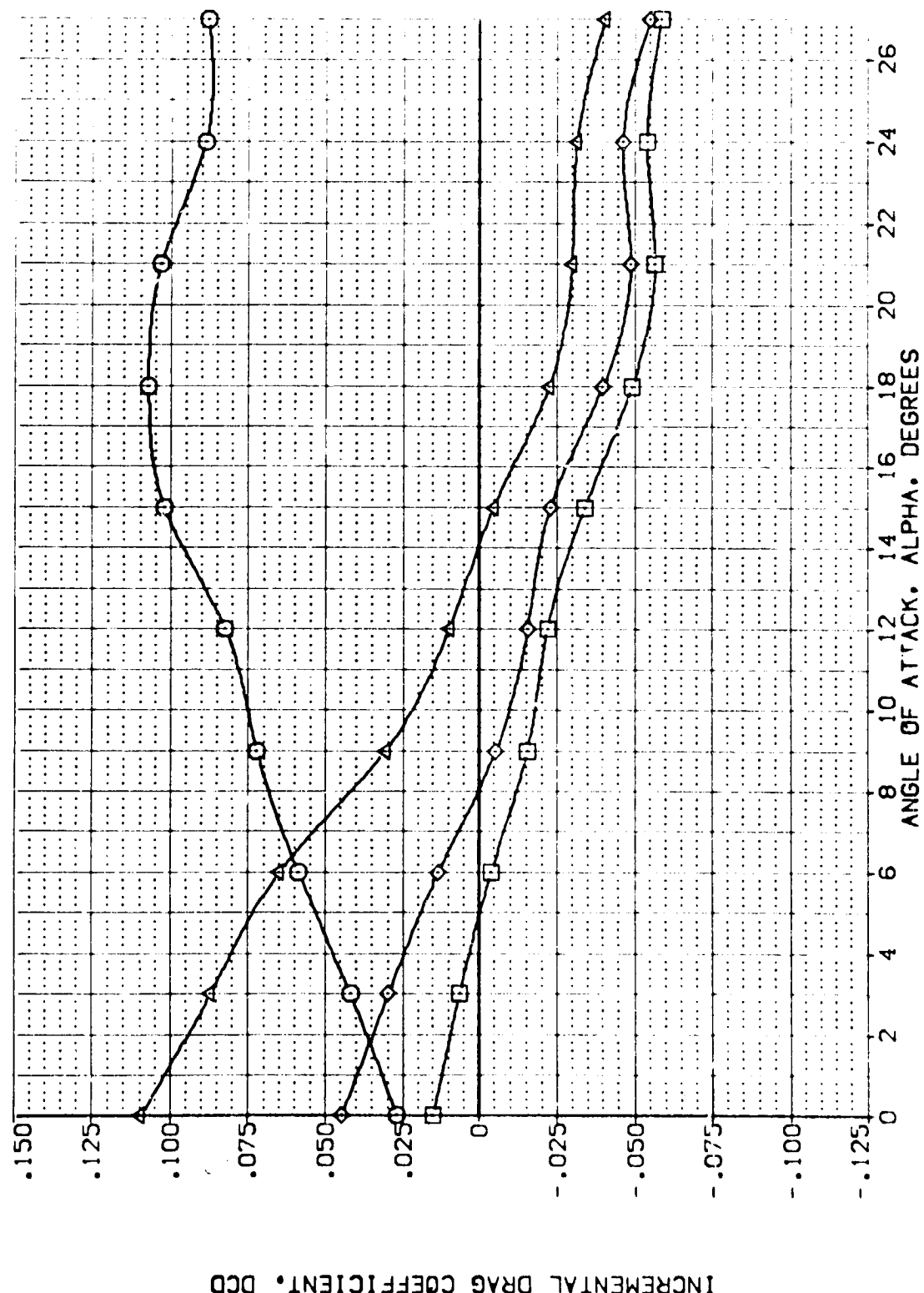


FIG. 7 ELEVON EFFECTS

(B)MACH = .80

DATA SET SYMBOL	CONF IGURATION DESCRIPTION	DE	AILRON	BOFLAP	SPOBRK	REFERENCE INFORMATION
(VEJ003)	ARC 11-747 DA53A B C M F VI	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(VEJ002)	ARC 11-747 DA53A B C M F VI	-10.000	.000	-11.700	25.000	LREF 14.2440 IN.
(VEJ019)	ARC 11-747 DA53A B C M F VI	-20.000	.000	-11.700	25.000	BREF 28.1004 IN.
(VEJ023)	ARC 11-747 DA53A B C M F VI	-40.000	.000	-11.700	25.000	XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

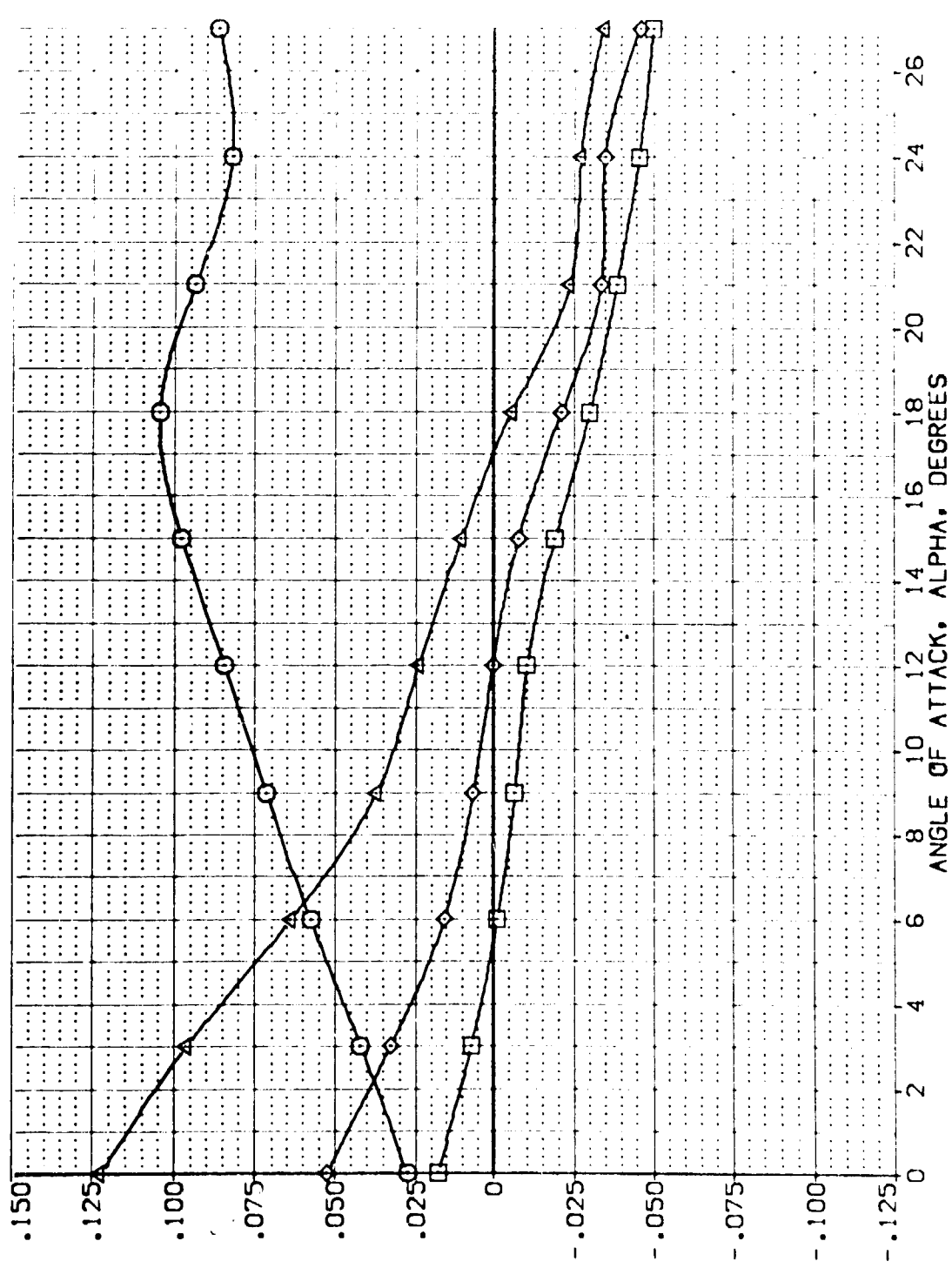


FIG. 7 ELEVON EFFECTS

(CJ)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DE	AILERON	BOFLAP	SPDRBK	REFERENCE INFORMATION	
[VEJ003]	ARC 11-747 BA53A B C M F VI	15.000	.000	-11.700	25.000	SREF	2.4210 SQ. FT.
[VEJ002]	ARC 11-747 BA53A B C M F VI	-10.000	.000	-11.700	25.000	LRREF	14.2440 IN.
[VEJ019]	ARC 11-747 BA53A B C M F VI	-20.000	.000	-11.700	25.000	BRREF	28.1004 IN.
[VEJ023]	ARC 11-747 BA53A B C M F VI	-40.000	.000	-11.700	25.000	YMRP	32.3010 IN.
						ZMRP	11.2500 IN.
						SCALE	.0300

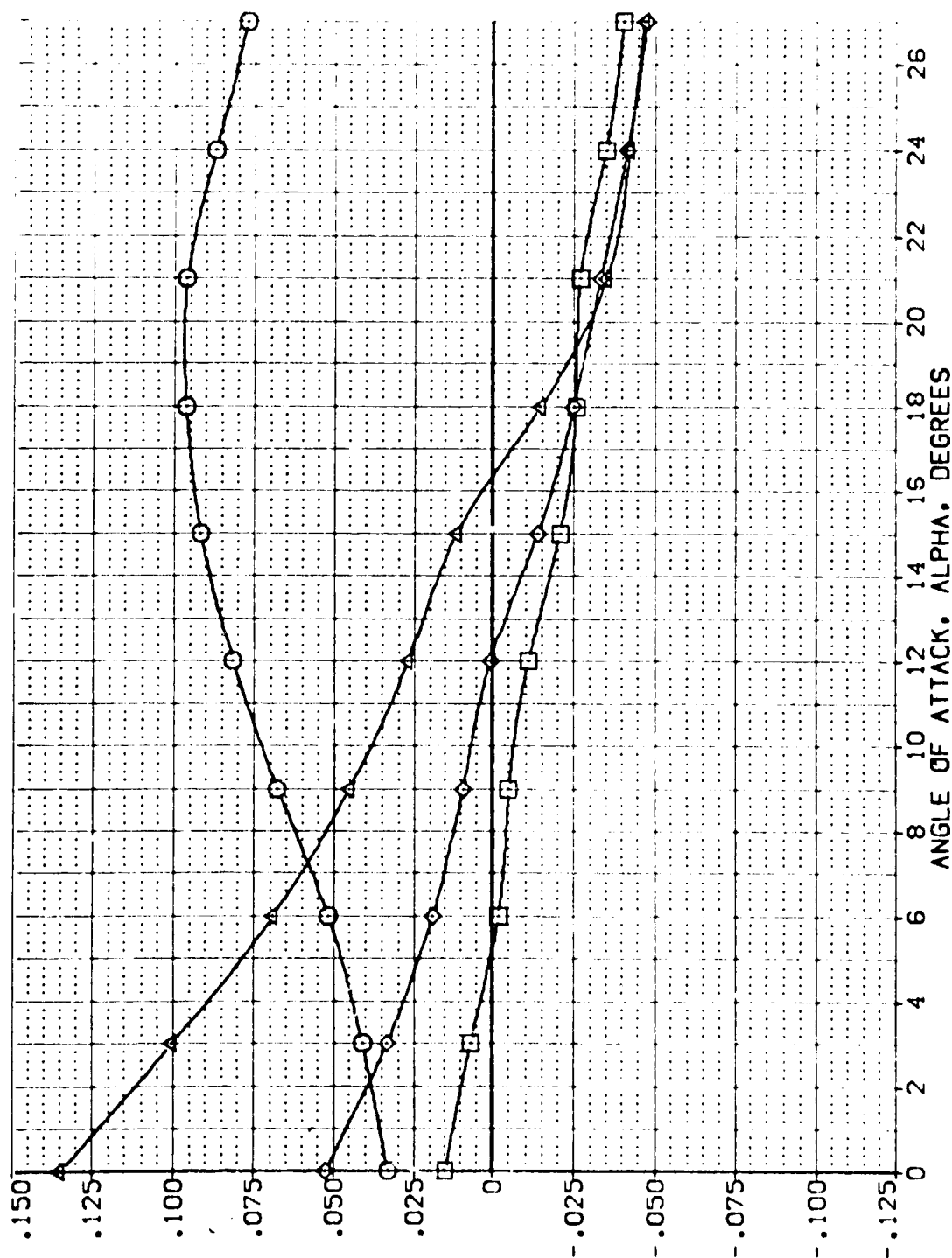


FIG. 7 ELEVON EFFECTS

(O)MACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DE	AILRON	BOFLAP	SPOBRK	REFERENCE INFORMATION
{VEJ003}	ARC 11-747 DA53A B C M F VI	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
{VEJ002}	ARC 11-747 DA53A B C M F VI	-10.000	.000	-11.700	25.000	LREF 14.2440 IN.
{VEJ019}	ARC 11-747 DA53A B C M F VI	-20.000	.000	-11.700	25.000	BREF 28.1004 IN.
{VEJ023}	ARC 11-747 DA53A B C M F VI	-40.000	.000	-11.700	25.000	XMRP .0000 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

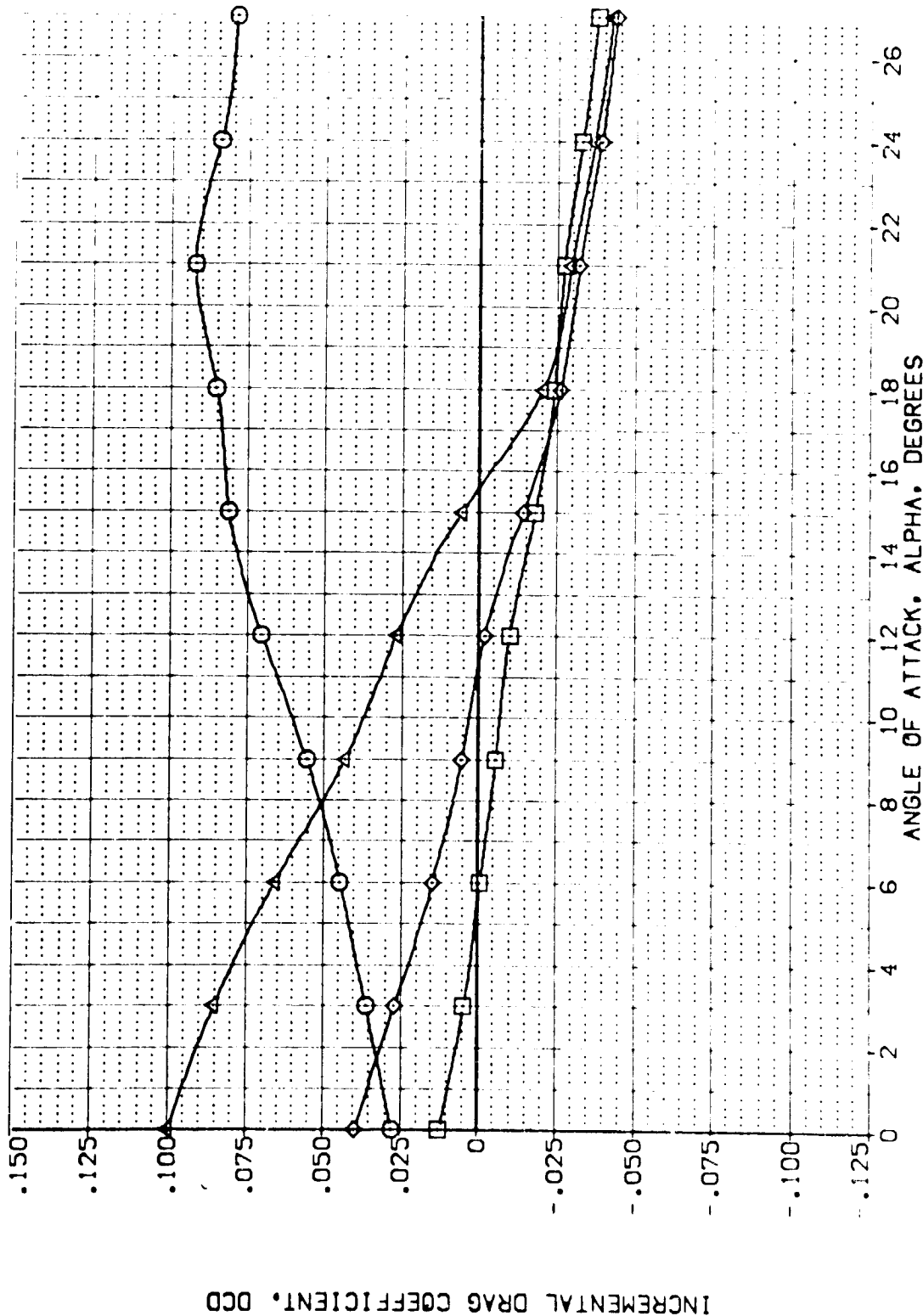


FIG. 7 ELEVON EFFECTS

(E)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DE	AILRON	BOFLAP	SPDRBK	REFERENCE INFORMATION
(VEJ003)	ARC 11-747 DA53A B C M F VI V	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(VEJ002)	ARC 11-747 DA53A B C M F VI V	-10.000	.000	-11.700	25.000	LREF 14.2440 IN.
(VEJ019)	ARC 11-747 DA53A B C M F VI V	-20.000	.000	-11.700	25.000	BREF 28.1004 IN.
(VEJ023)	ARC 11-747 DA53A B C M F VI V	-40.000	.000	-11.700	25.000	XRRP 32.310 IN.
						YRRP .0000 IN.
						ZRRP 11.2500 IN.
						SCALE .0300

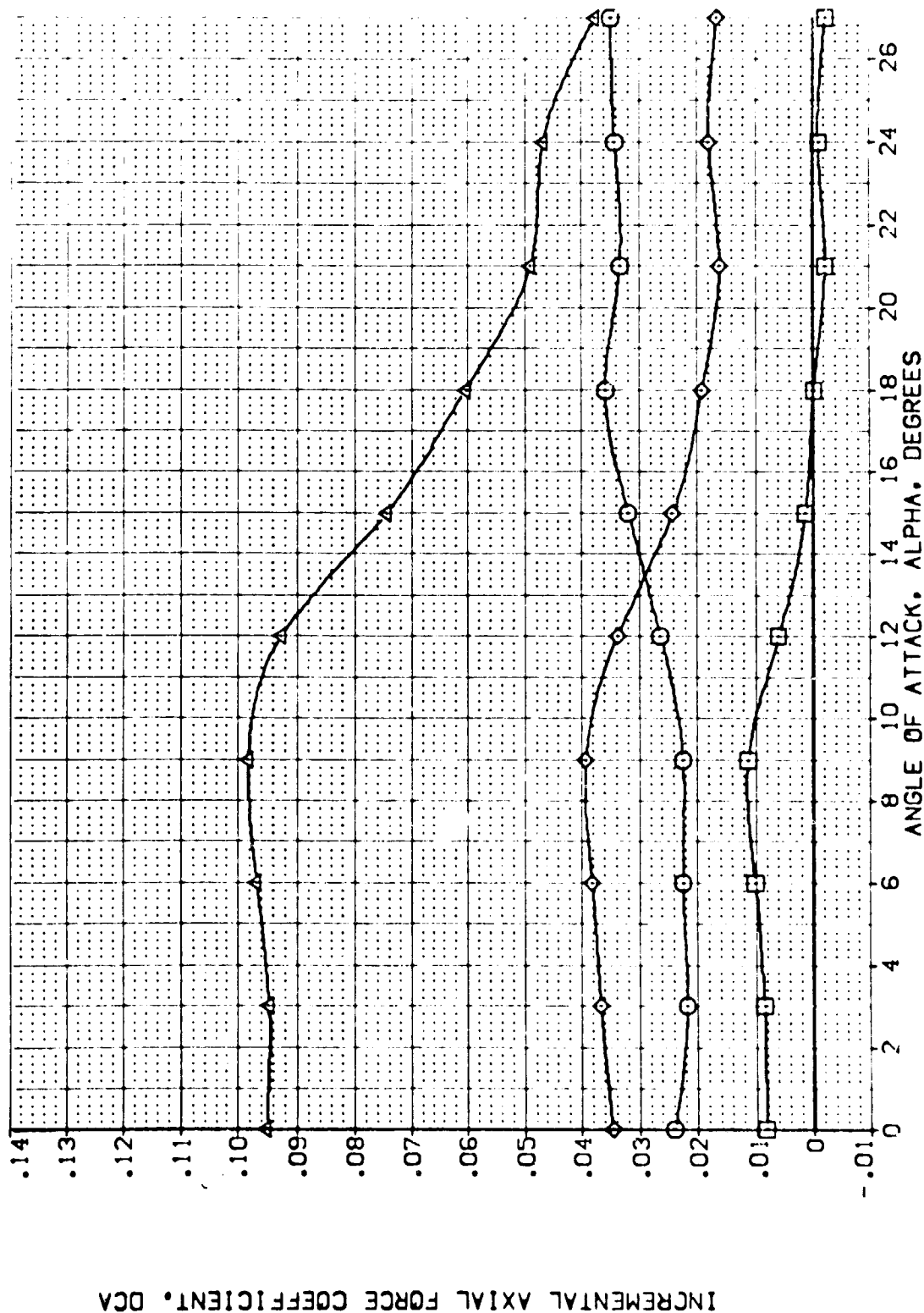


FIG. 7 ELEVON EFFECTS

(A)MACH = .60



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DE	AILRON	BOFLAP	SPOBRK	REFERENCE INFORMATION
{VEJ003}	ARC 11-747 OAS3A B C H F VI V	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
{VEJ002}	ARC 11-747 OAS3A B C H F VI V	-10.000	.000	-11.700	25.000	LREF 14.2440 IN.
{VEJ019}	ARC 11-747 OAS3A B C H F VI V	-20.000	.000	-11.700	25.000	BREF 28.1004 IN.
{VEJ023}	ARC 11-747 OAS3A B C H F VI V	-40.000	.000	-11.700	25.000	XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

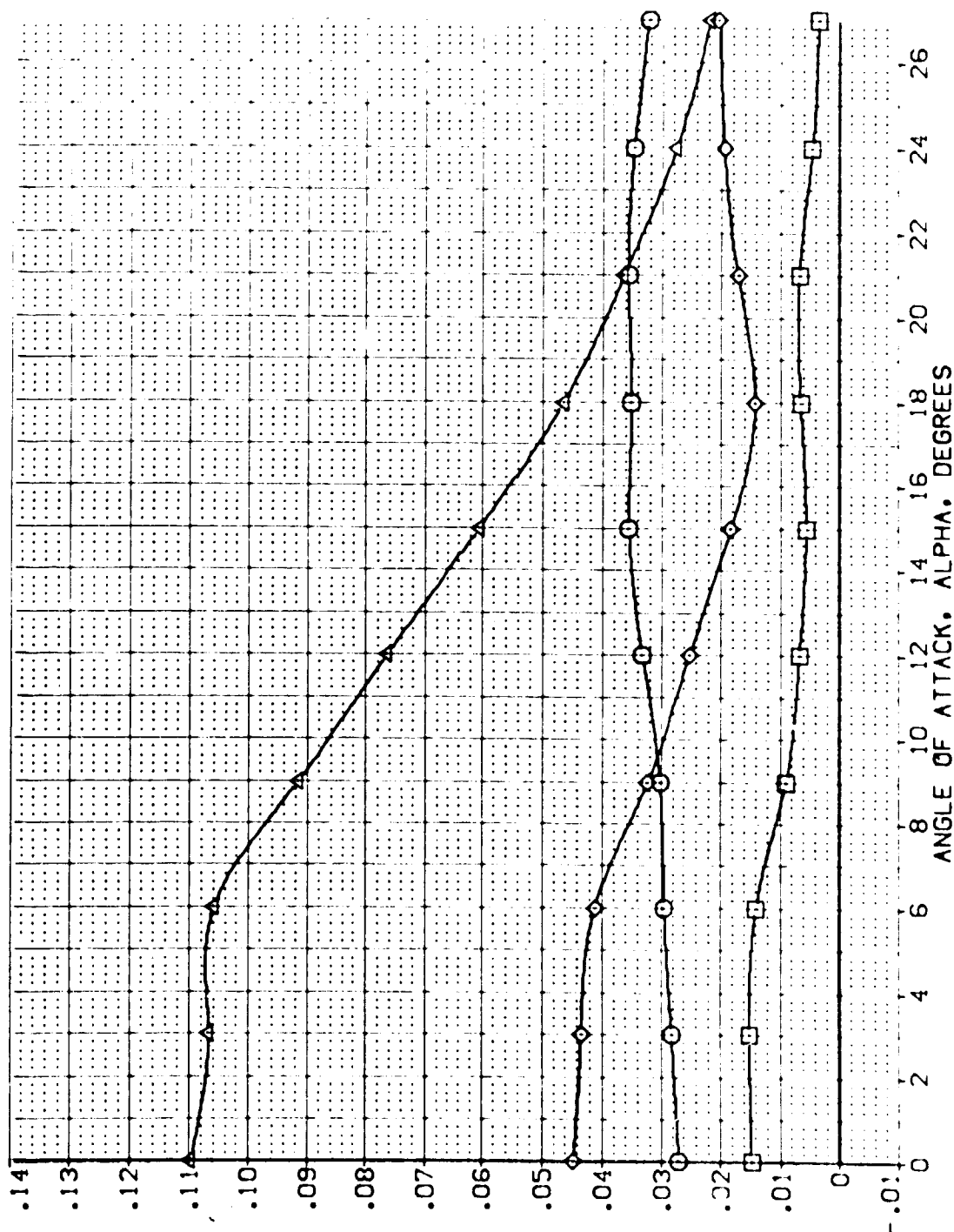


FIG. 7 ELEVON EFFECTS

(B)MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DE	AILRON	BDELAP	SPOBRK	REFERENCE INFORMATION
(VEJ003)	ARC 11-747 D-53A B C M F VI V	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(VEJ002)	ARC 11-747 D-53A B C M F VI V	-10.000	.000	-11.700	25.000	LREF 14.2440 IN.
(VEJ019)	ARC 11-747 D-53A B C M F VI V	-20.000	.000	-11.700	25.000	BREF 28.1004 IN.
(VEJ023)	ARC 11-747 D-53A B C M F VI V	-40.000	.000	-11.700	25.000	XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0000

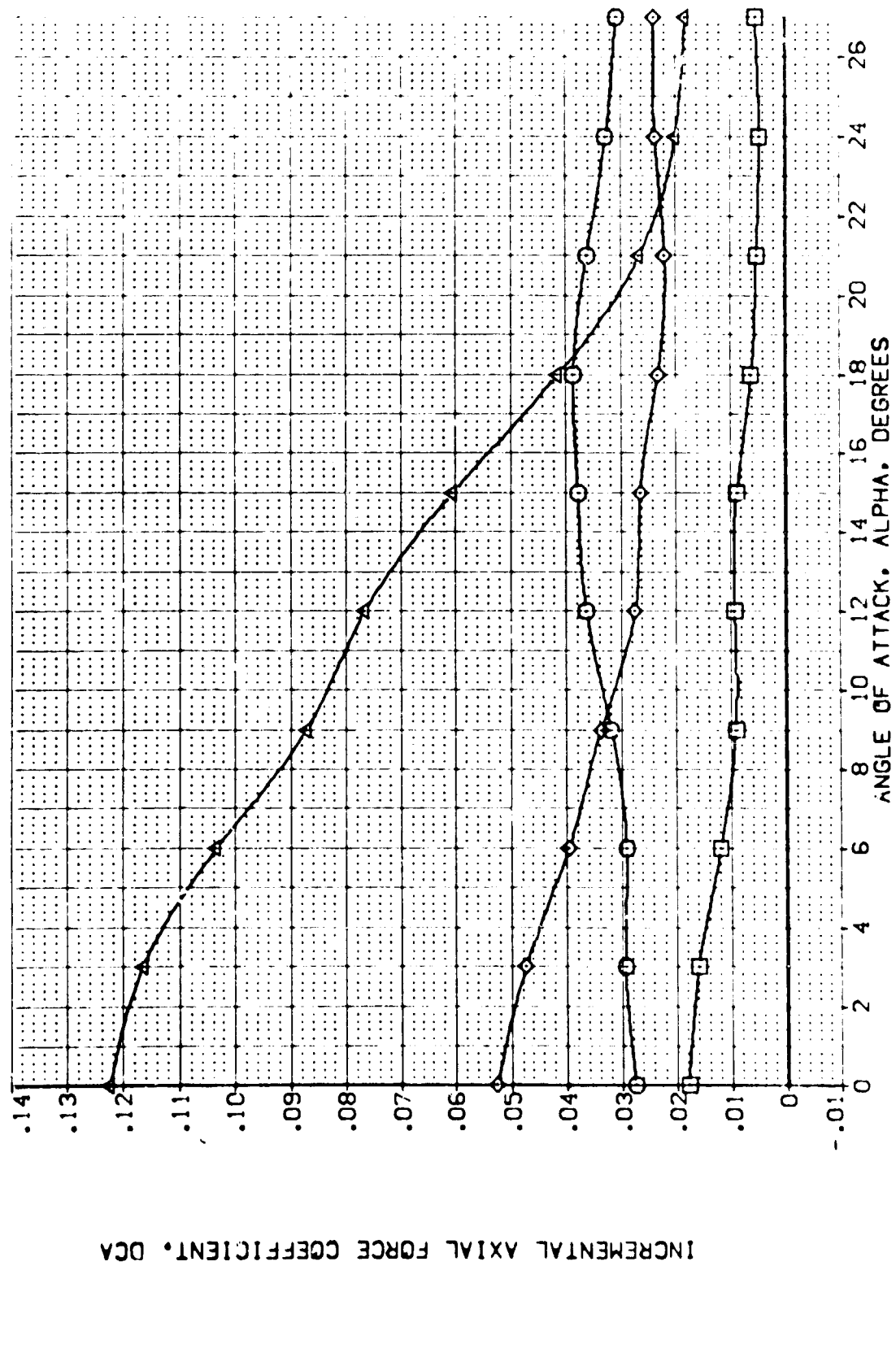


FIG. 7 ELEVON EFFECTS

(C)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DE	AILERON	BDFLAP	SPDBRK	REFERENCE INFORMATION
(VF0003)	ARC 11-747 BA53A B C M F V1 V	15.000	.000	-11.700	25.000	SREF 2.4210
(VF0002)	ARC 11-747 BA53A B C M F V1 V	-10.000	.000	-11.700	25.000	LREF 14.2440
(VF0001)	ARC 11-747 BA53A B C M F V1 V	-20.000	.000	-11.700	25.000	BREF 26.1004
(VF0000)	ARC 11-747 BA53A B C M F V1 V	-40.000	.000	-11.700	25.000	XREF 32.3010
						YREF .0000
						ZREF 11.2500
						SCALE .0300

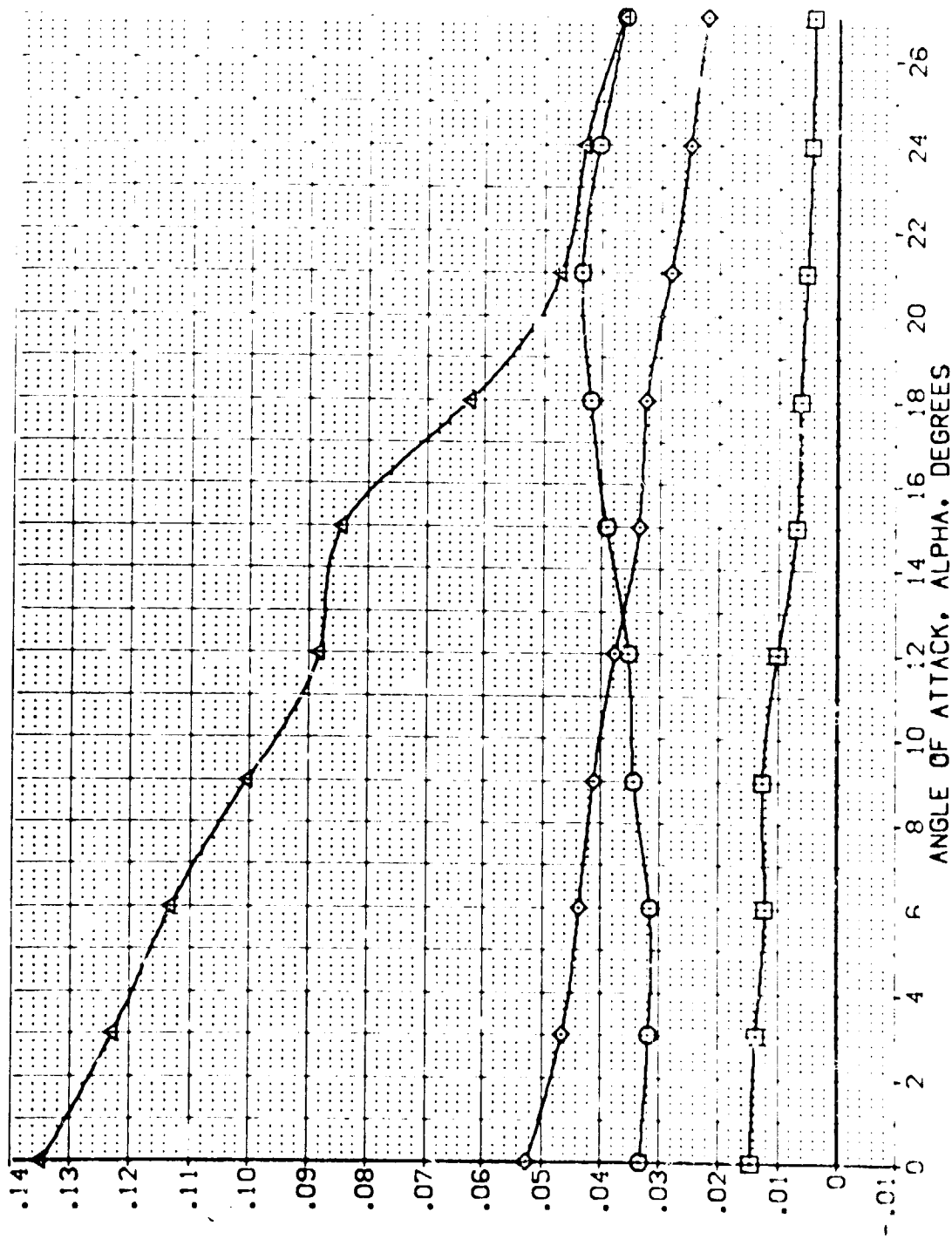
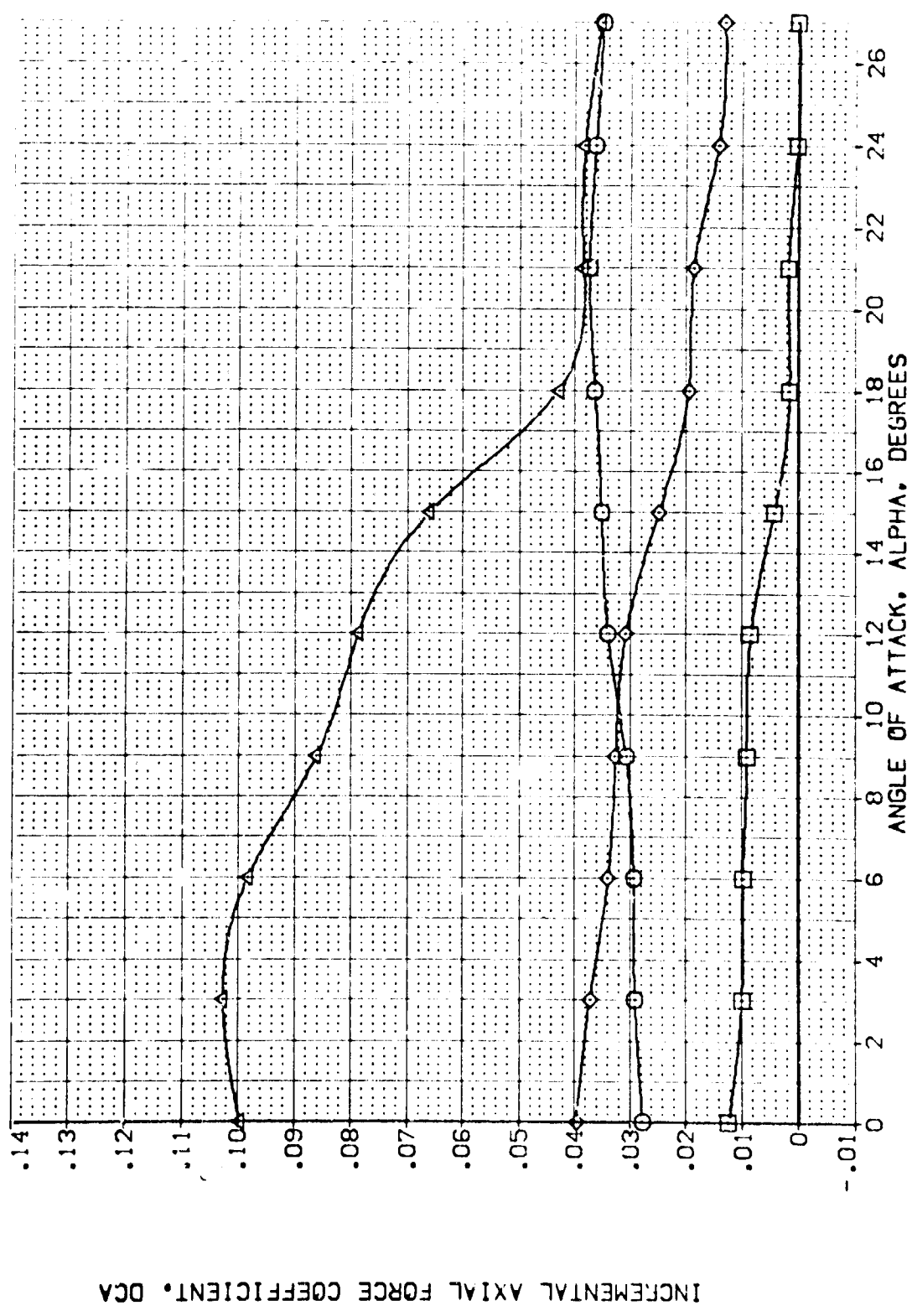


FIG. 7 ELEVON EFFECTS

(D)MACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DE	AILRON	BOLAP	SPDRK	REFERENCE INFORMATION
(VEJ003)	ARC 11-747 DA53A B C M F V1 V	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(VEJ002)	ARC 11-747 DA53A B C M F V1 V	-10.000	.000	-11.700	25.000	LREF 14.2440 IN.
(VEJ019)	ARC 11-747 DA53A B C M F V1 V	-20.000	.000	-11.700	25.000	BREF 28.1004 IN.
(VEJ023)	ARC 11-747 DA53A B C M F V1 V	-40.000	.000	-11.700	25.000	XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300



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FIG. 7 ELEVON EFFECTS

(E)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DE	AILRON	BDFLAP	SPDBRK	REFERENCE INFORMATION	
(VEJ003)	ARC 11-747 DA53A B C H F V1	15.000	.000	-11.700	25.000	SREF	2.4210 SQ.FT.
(VEJ002)	ARC 11-747 DA53A B C H F V1	-10.000	.000	-11.700	25.000	LREF	14.2440 IN.
(VEJ019)	ARC 11-747 DA53A B C H F V1	-20.000	.000	-11.700	25.000	BREF	28.1004 IN.
(VEJ023)	ARC 11-747 DA53A B C H F V1	-40.000	.000	-11.700	25.000	YMRP	32.3010 IN.
						ZMRP	11.2500 IN.
						SCALE	.0300

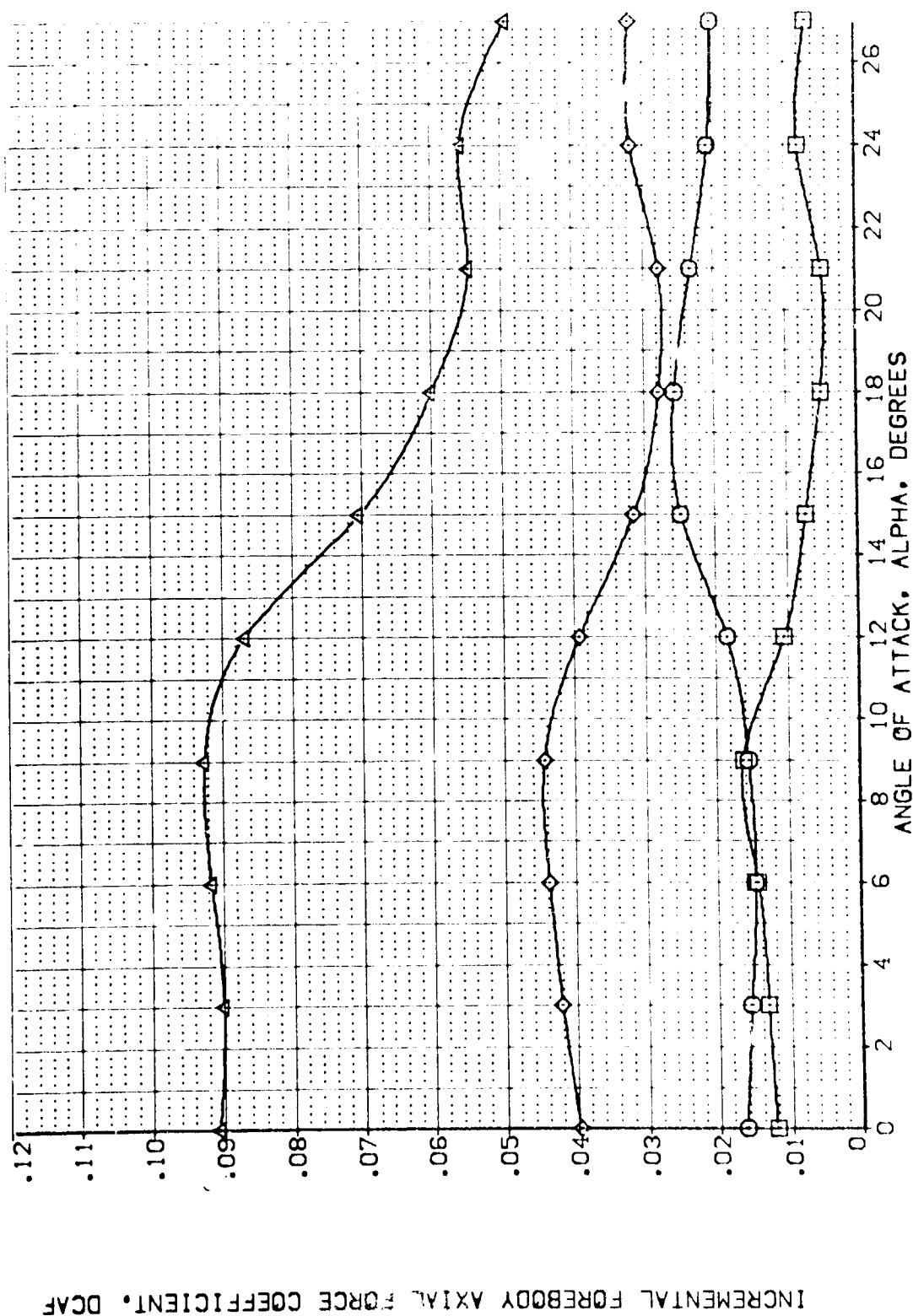


FIG. 7 ELEVON EFFECTS

(A)MACH = .60



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DE	AILRON	BOFLAP	SPDRK	REFERENCE INFORMATION
(VEJ003)	ARC 11-747 DA53A B C M F V	15.000	.000	-11.700	25.000	SREF 2.4210 IN.
(VEJ002)	ARC 11-747 DA53A B C M F V	-10.000	.000	-11.700	25.000	LREF 14.2440 IN.
(VEJ019)	ARC 11-747 DA53A B C M F V	-20.000	.000	-11.700	25.000	BREF 28.1004 IN.
(VEJ023)	ARC 11-747 DA53A B C M F V	-40.000	.000	-11.700	25.000	XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

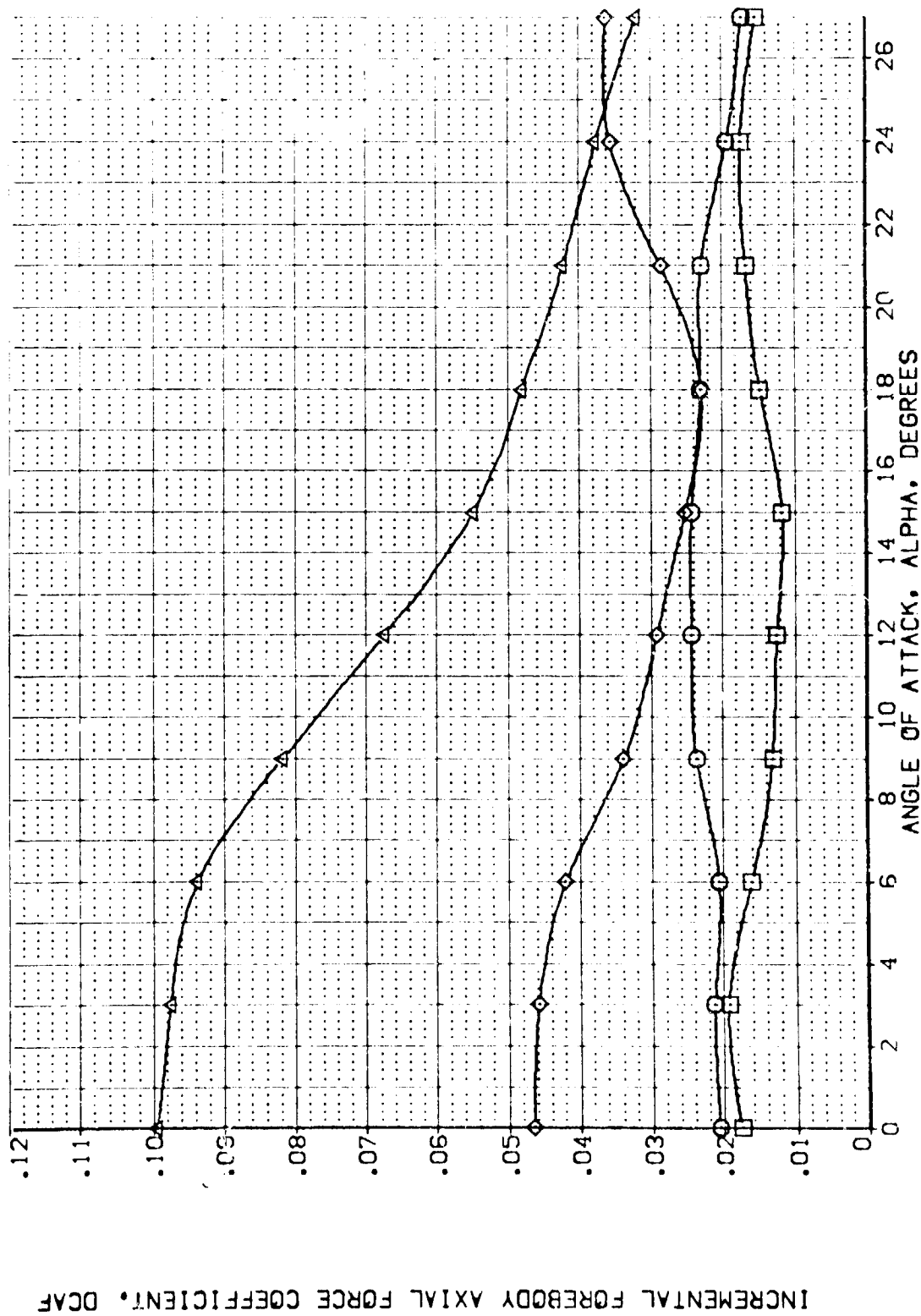


FIG. 7 ELEVON EFFECTS

(B) MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DE	ATLRN	BDELAP	SPDBRK	REFERENCE INFORMATION
[VEJ003]	ARC 11-747 OAS3A B C M F VI V	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[VEJ002]	ARC 11-747 OAS3A B C M F VI V	-10.000	.000	-11.700	25.000	LREF 14.2440 IN.
[VEJ019]	ARC 11-747 OAS3A B C M F VI V	-20.000	.000	-11.700	25.000	BREF 28.1004 IN.
[VEJ023]	ARC 11-747 OAS3A B C M F VI V	-40.000	.000	-11.700	25.000	XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

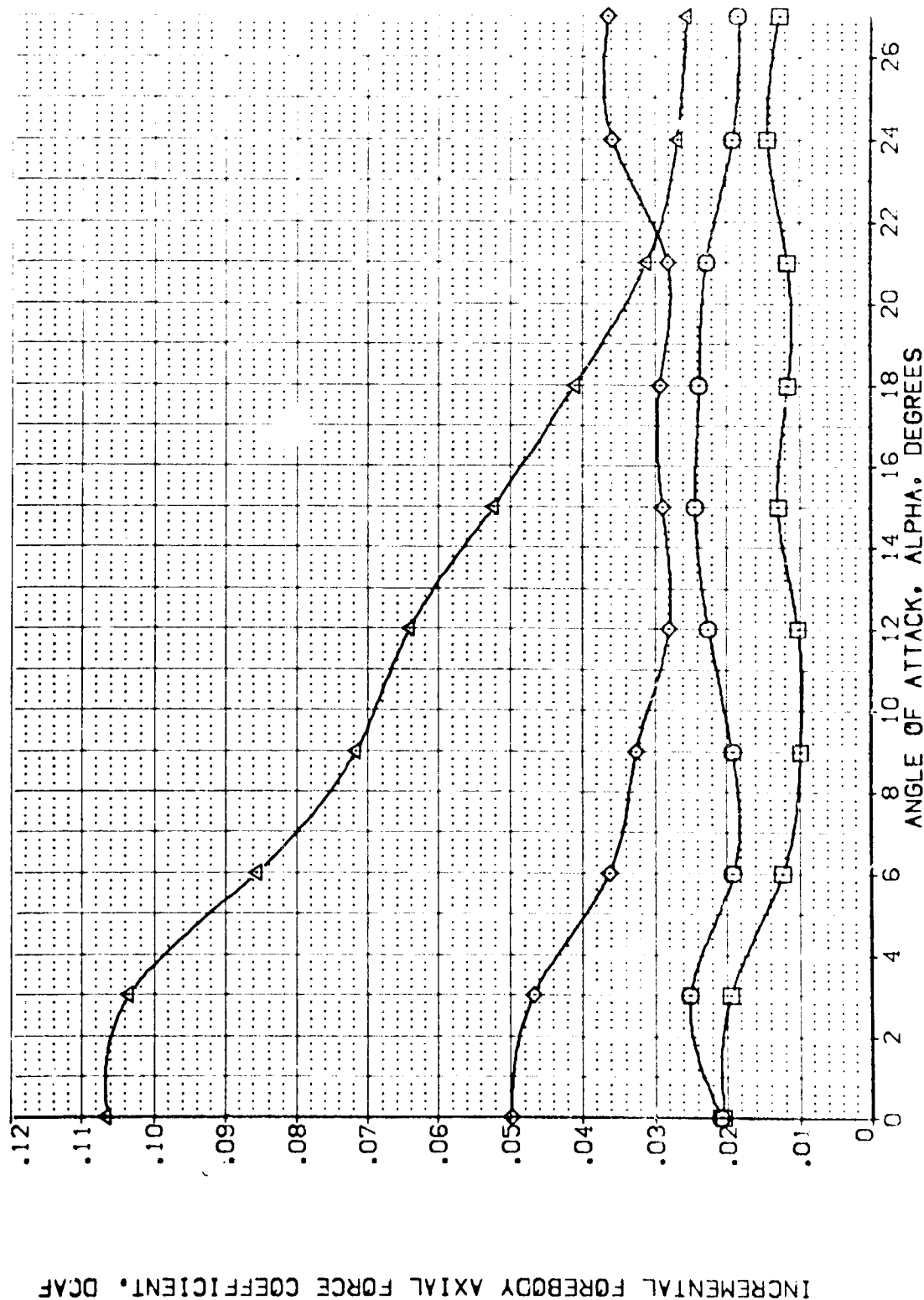


FIG. 7 ELEVON EFFECTS

(CJ)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DE	ATLRN	BDFLAP	SPOBRK	REFERENCE INFORMATION
[VE1003]	ARC 11-747 OAS3A B C M F VI V	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[VE1002]	ARC 11-747 OAS3A B C M F VI V	-10.000	.000	-11.700	25.000	LREF 14.2440 IN.
[VE1019]	ARC 11-747 OAS3A B C M F VI V	-20.000	.000	-11.700	25.000	BREF 28.1004 IN.
[VE1023]	ARC 11-747 OAS3A B C M F VI V	-40.000	.000	-11.700	25.000	XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

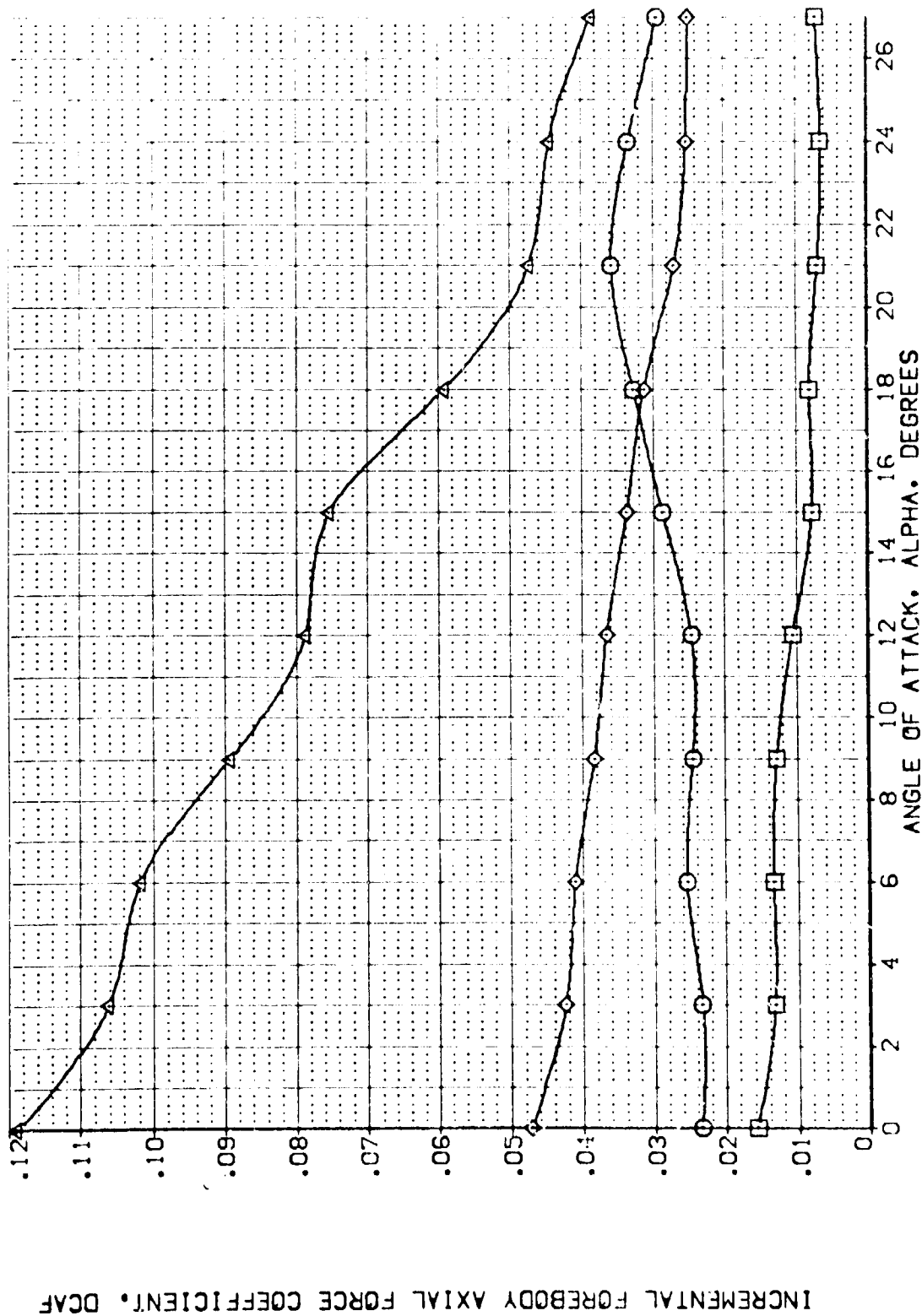


FIG. 7 ELEVON EFFECTS

(O) MACH = 1.05



DATA SET SYMBOL    CONFIGURATION DESCRIPTION    DE    AILRON    BOFLAP    SPOBRK    REFERENCE INFORMATION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DE	AILRON	BOFLAP	SPOBRK	REFERENCE INFORMATION
(VEJ003)	ARC 11-747 DASSA B C M F VI V	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(VEJ002)	ARC 11-747 DASSA B C M F VI V	-10.000	.000	-11.700	25.000	LREF 14.2440 N.
(VEJ019)	ARC 11-747 DASSA B C M F VI V	-20.000	.000	-11.700	25.000	BREF 28.1004 N.
(VEJ023)	ARC 11-747 DASSA B C M F VI V	-40.000	.000	-11.700	25.000	XMRP 32.3010 N.
						YMRP .0000 N.
						ZMRP 11.2500 N.
						SCALE .0300

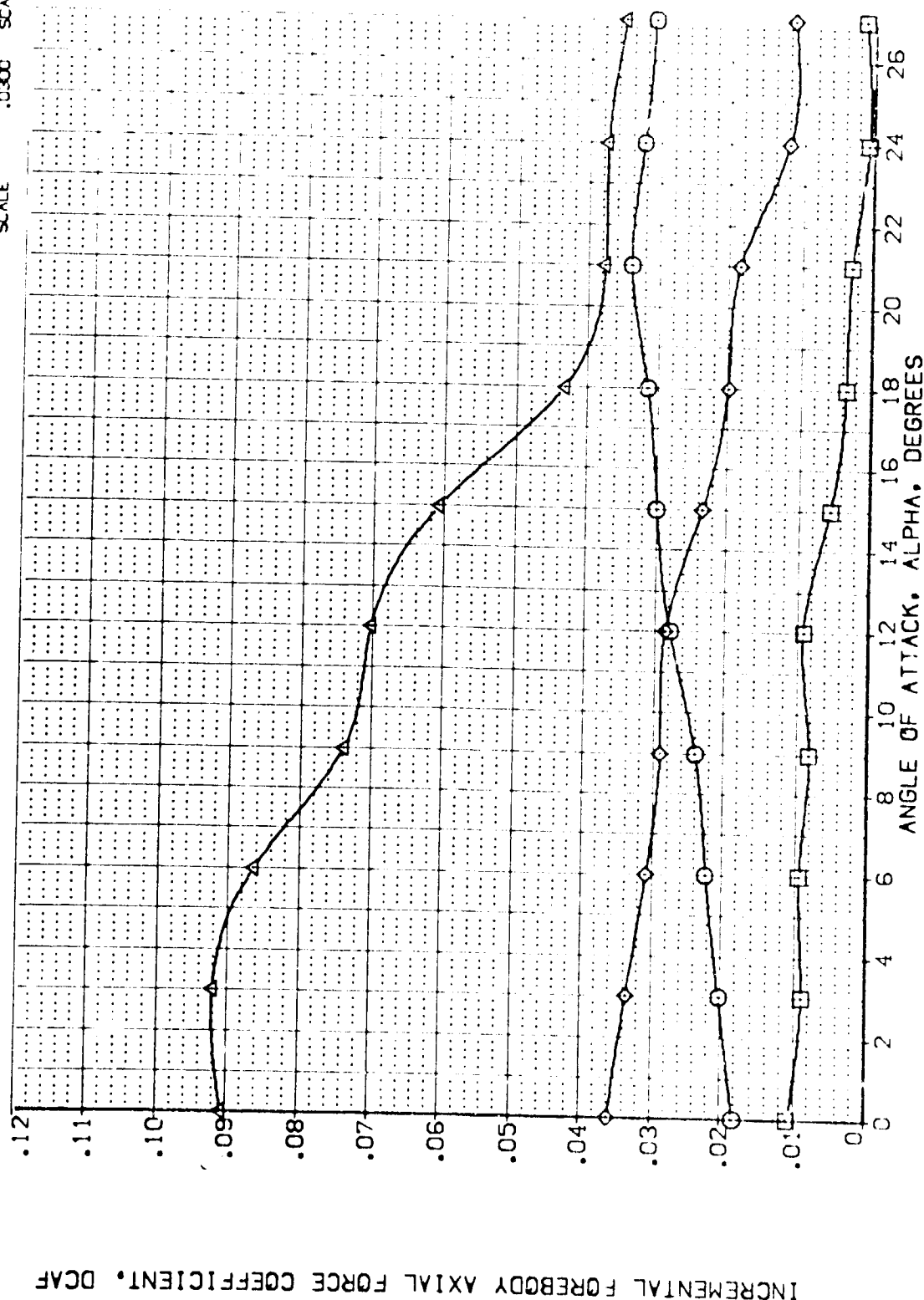


FIG. 7 ELEVON EFFECTS

(C)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DE	AILRON	BDFLAP	SPDRBK	REFERENCE INFORMATION
[VEJ003]	ARC 11-747 BASS3A B C M F VI	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[VEJ002]	ARC 11-747 BASS3A B C M F VI	-10.000	.000	-11.700	25.000	LREF 14.2440 IN.
[VEJ019]	ARC 11-747 BASS3A B C M F VI	-20.000	.000	-11.700	25.000	BREF 28.1004 IN.
[VEJ023]	ARC 11-747 BASS3A B C M F VI	-40.000	.000	-11.700	25.000	XMRP 32.3010 IN.
						YMRP 11.0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

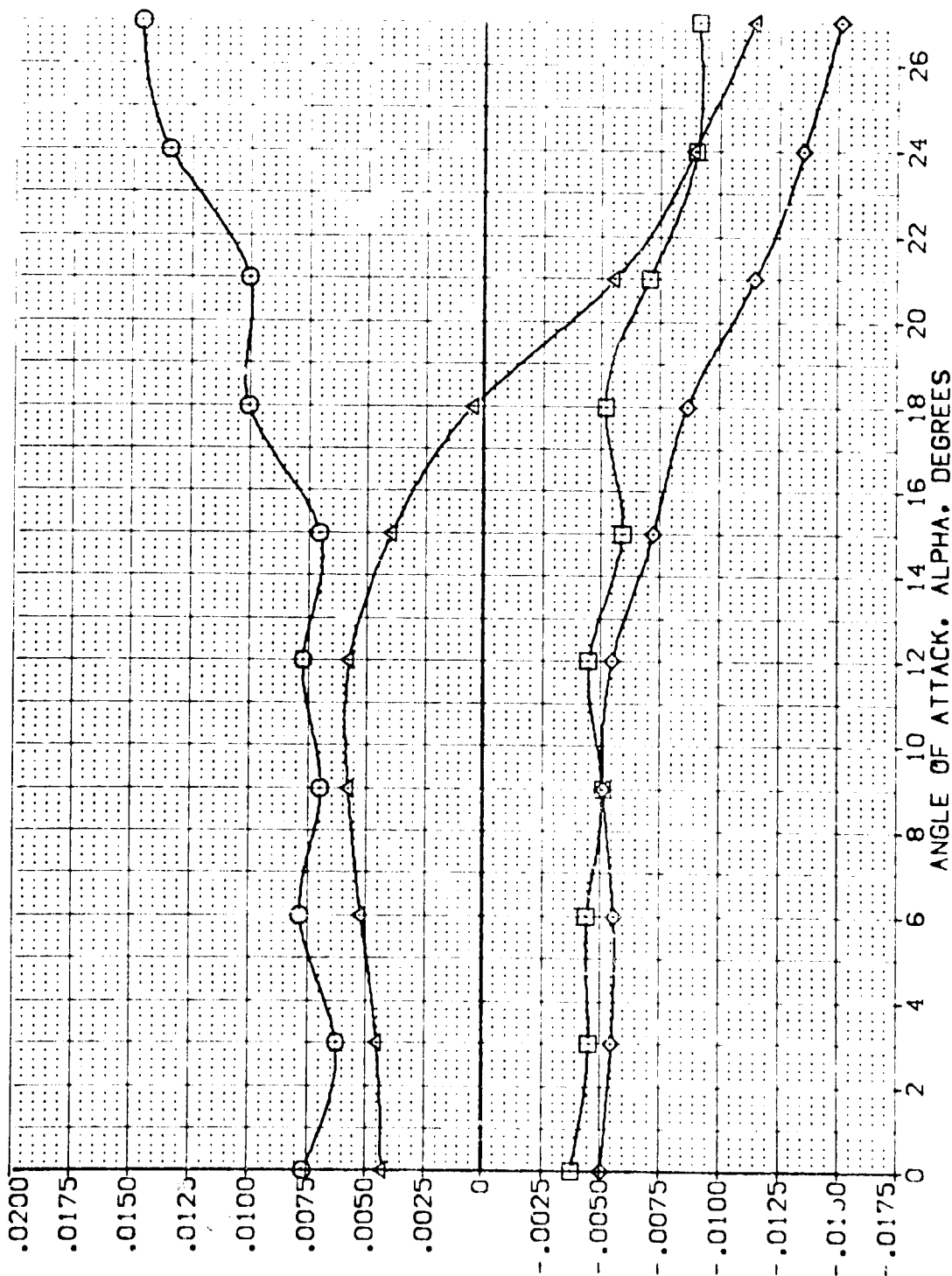


FIG. 7 ELEVON EFFECTS

(M)MACH = .60

DATA SET SYMBOL		CONFIGURATION DESCRIPTION		DE		AILRON		BOFLAP		SPDRBK		REFERENCE INFORMATION	
[VEJ003]	Q	ARC 11-747	QAS3A B C M F VI	15.000	.000	-11.700	25.000	SREF	2.4210	50.000			
[VEJ002]	X	ARC 11-747	QAS3A B C M F VI	-10.000	.000	-11.700	25.000	LREF	14.7440	11.000			
[VEJ019]		ARC 11-747	QAS3A B C M F VI	-20.000	.000	-11.700	25.000	BREF	28.1004	11.000			
[VEJ023]		ARC 11-747	QAS3A B C M F VI	-40.000	.000	-11.700	25.000	XMRP	32.0010	11.000			
								YMRP	11.2500	11.000			
								ZMRP	11.0300	11.000			
								SCALE					

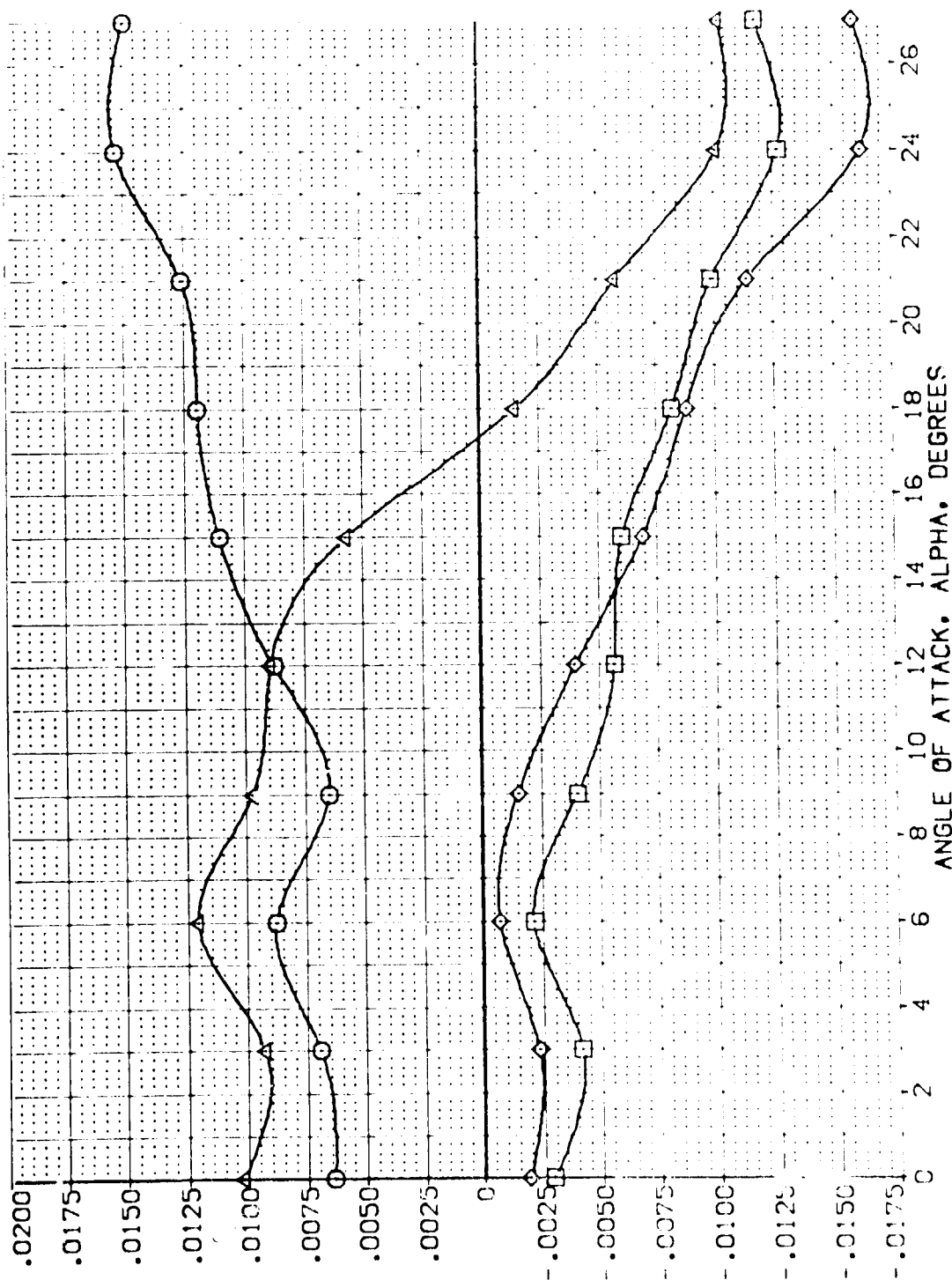


FIG. 7 ELEVON EFFECTS

(B)MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DE	AILRON	BOFLAP	SPDRK	REFERENCE INFORMATION	
(VEJ003)	ARC 11-747 DA53A B C H F VI V	15.000	.000	-11.700	25.000	SREF	2.4210 SQ.FT.
(VEJ002)	ARC 11-747 DA53A B C H F VI V	-10.000	.000	-11.700	25.000	LREF	14.2440 IN.
(VEJ015)	ARC 11-747 DA53A B C H F VI V	-20.000	.000	-11.700	25.000	BREF	28.1004 IN.
(VEJ023)	ARC 11-747 DA53A B C H F VI V	-40.000	.000	-11.700	25.000	YMRP	.0000 IN.
						ZMRP	11.2500 IN.
						SCALE	0300

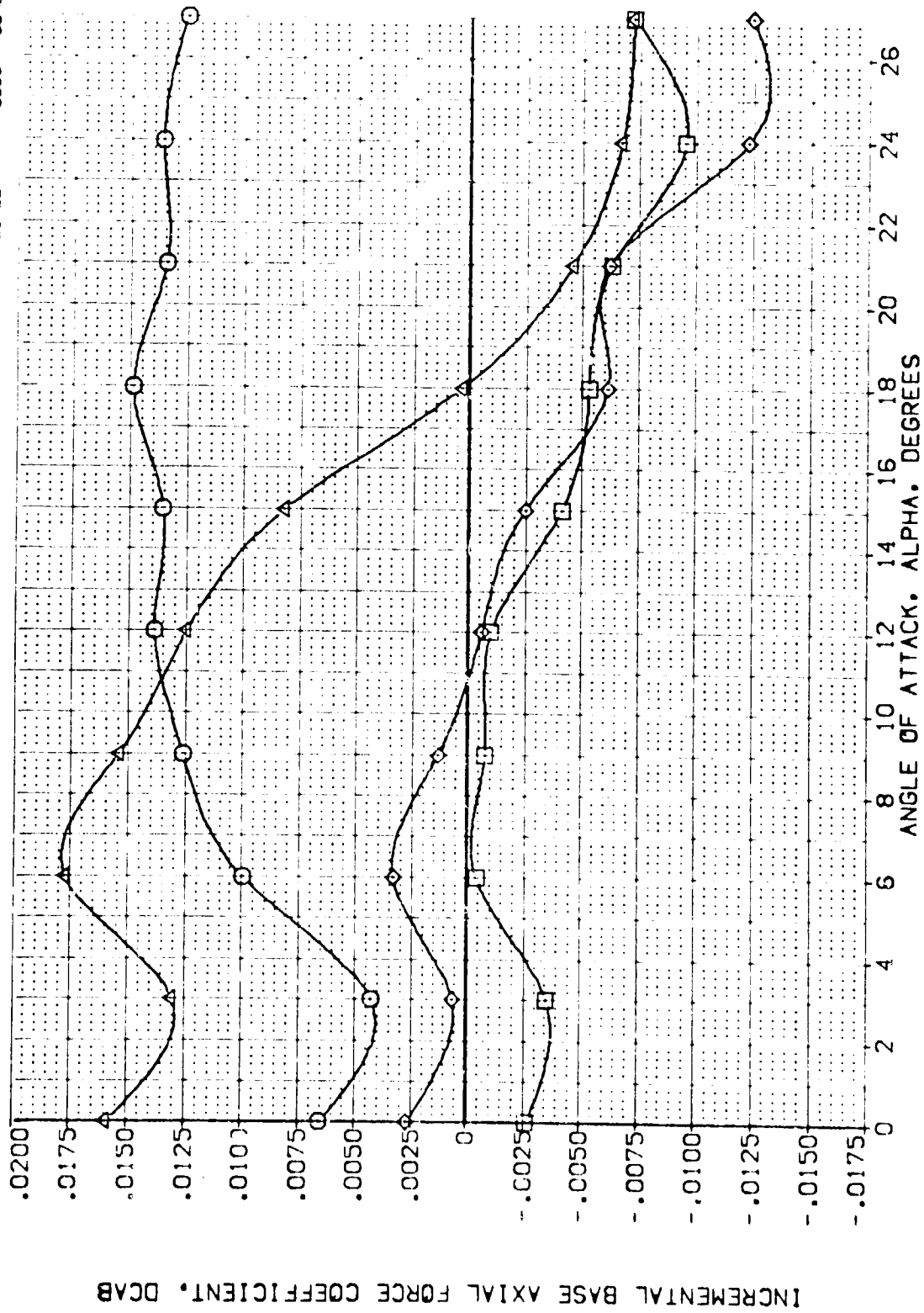


FIG. 7 ELEVON EFFECTS

(C)MACH = .90



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DE	AILRON	BDF LAP	SPOBRK	REFERENCE INFORMATION
{VEJ003}	ARC 11-747 BA53A B C H F VI V	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
{VEJ002}	ARC 11-747 BA53A B C H F VI V	-10.000	.000	-11.700	25.000	LREF 14.2440
{VEJ019}	ARC 11-747 BA53A B C H F VI V	-20.000	.000	-11.700	25.000	BREF 28.1004
{VEJ023}	ARC 11-747 BA53A B C H F VI V	-40.000	.000	-11.700	25.000	MREF 32.3010
						YMRP .0000
						ZMRP 11.2500
						SCALE .0300

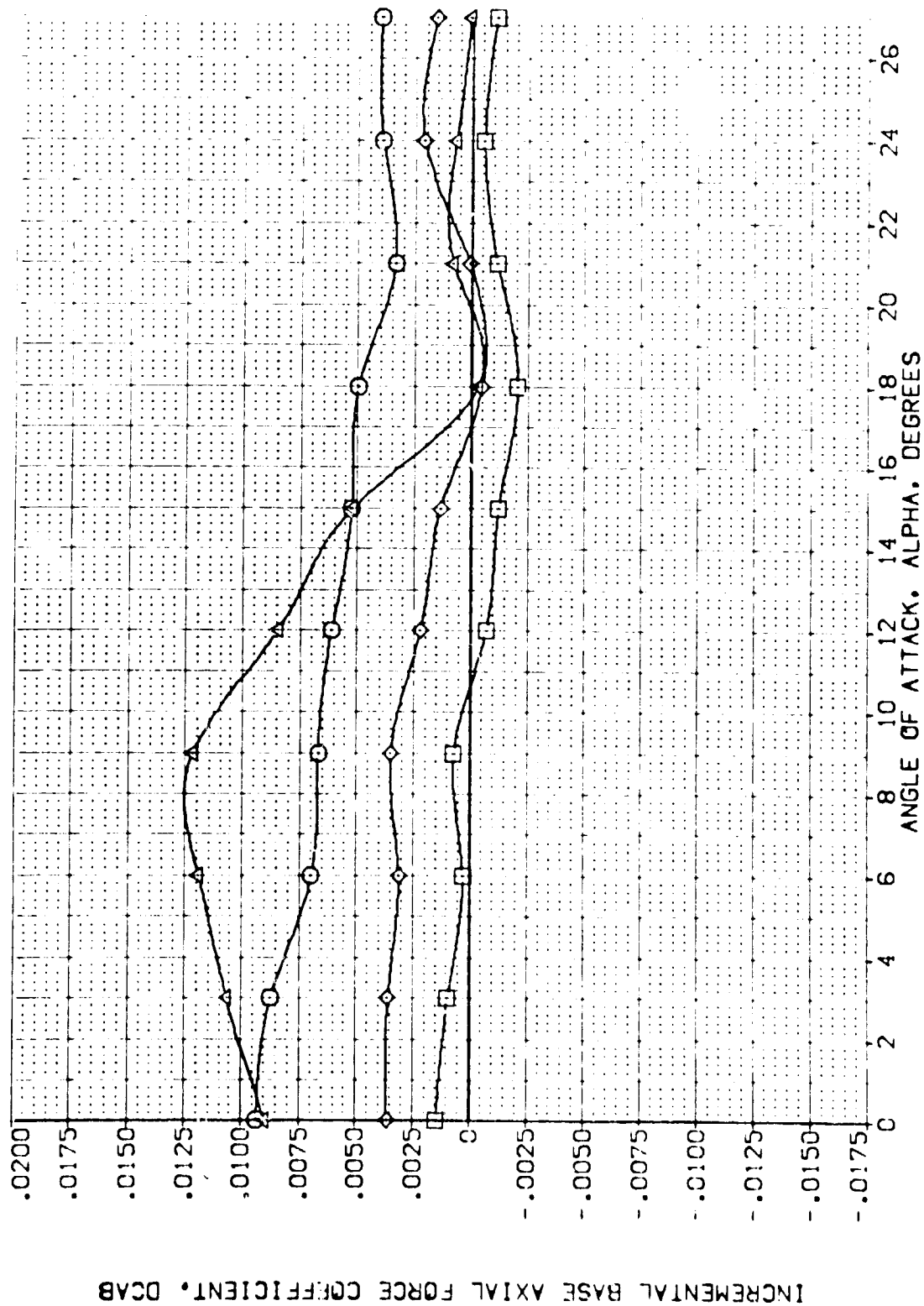


FIG. 7 ELEVON EFFECTS

(E)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DE	AIRLAP	BOFLAP	SPOBRK	REFERENCE INFORMATION
(VEJ003)	ARC 11-747 OAS3A B C M F V1 V	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(VEJ002)	ARC 11-747 OAS3A B C M F V1 V	-10.000	.000	-11.700	25.000	LREF 14.2440 IN.
(VEJ019)	ARC 11-747 OAS3A B C M F V1 V	-20.000	.000	-11.700	25.000	BREF 28.1004 IN.
(VEJ023)	ARC 11-747 OAS3A B C M F V1 V	-40.000	.000	-11.700	25.000	XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

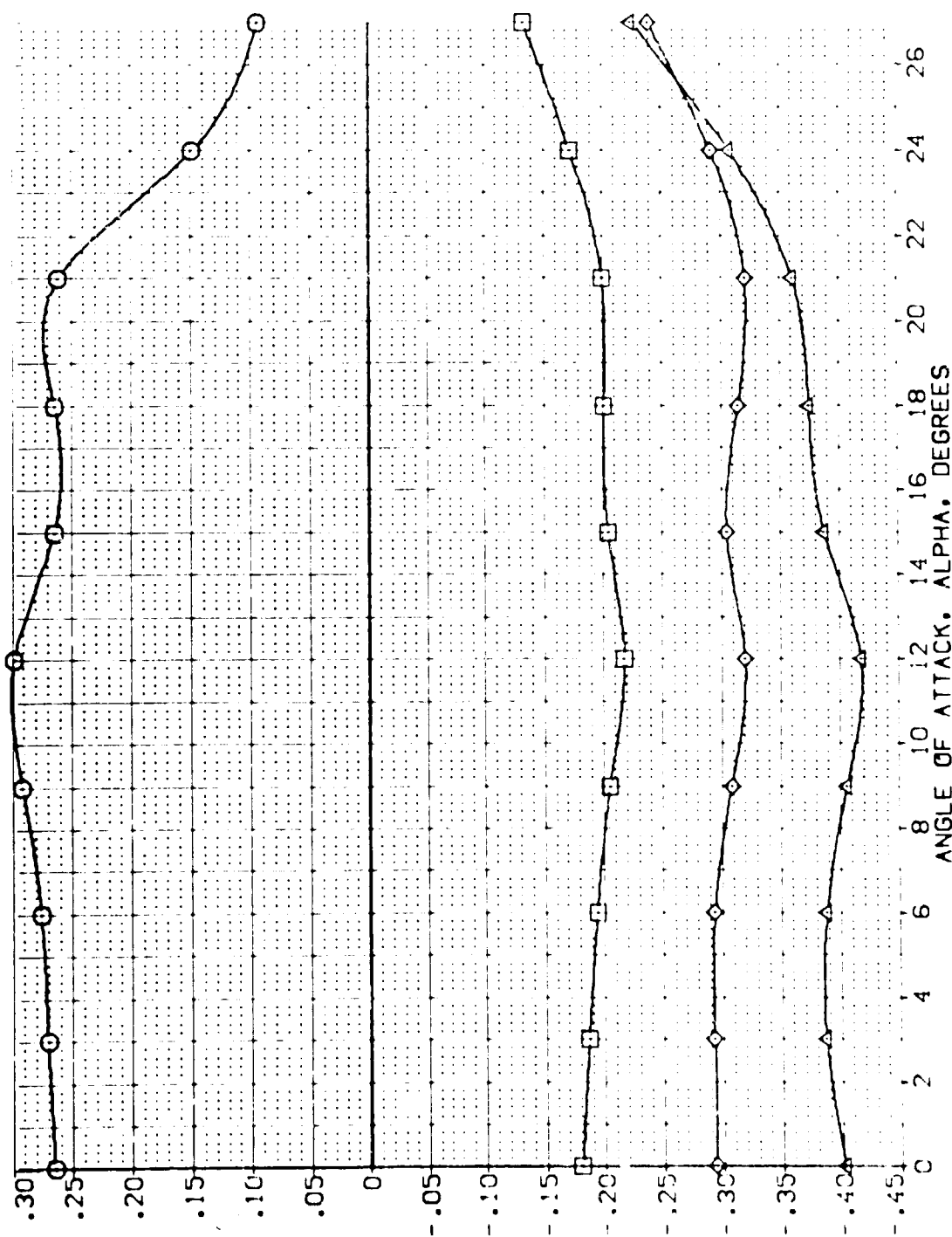


FIG. 7 ELEVON EFFECTS

(A)MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DE	AILRON	BDF LAP	SPTRBK	REFERENCE INFORMATION
(VEJ003)	ARC 11-747 CAS3A B C H F VI V	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(VEJ002)	ARC 11-747 CAS3A B C H F VI V	-10.000	.000	-11.700	25.000	LREF 14.2440 IN.
(VEJ019)	ARC 11-747 CAS3A B C H F VI V	-20.000	.000	-11.700	25.000	BREF 28.1004 IN.
(VEJ023)	ARC 11-747 CAS3A B C H F VI V	-40.000	.000	-11.700	25.000	XMRP 32.3010
						YMRP 11.7500
						ZMRP .0300
						SCALE

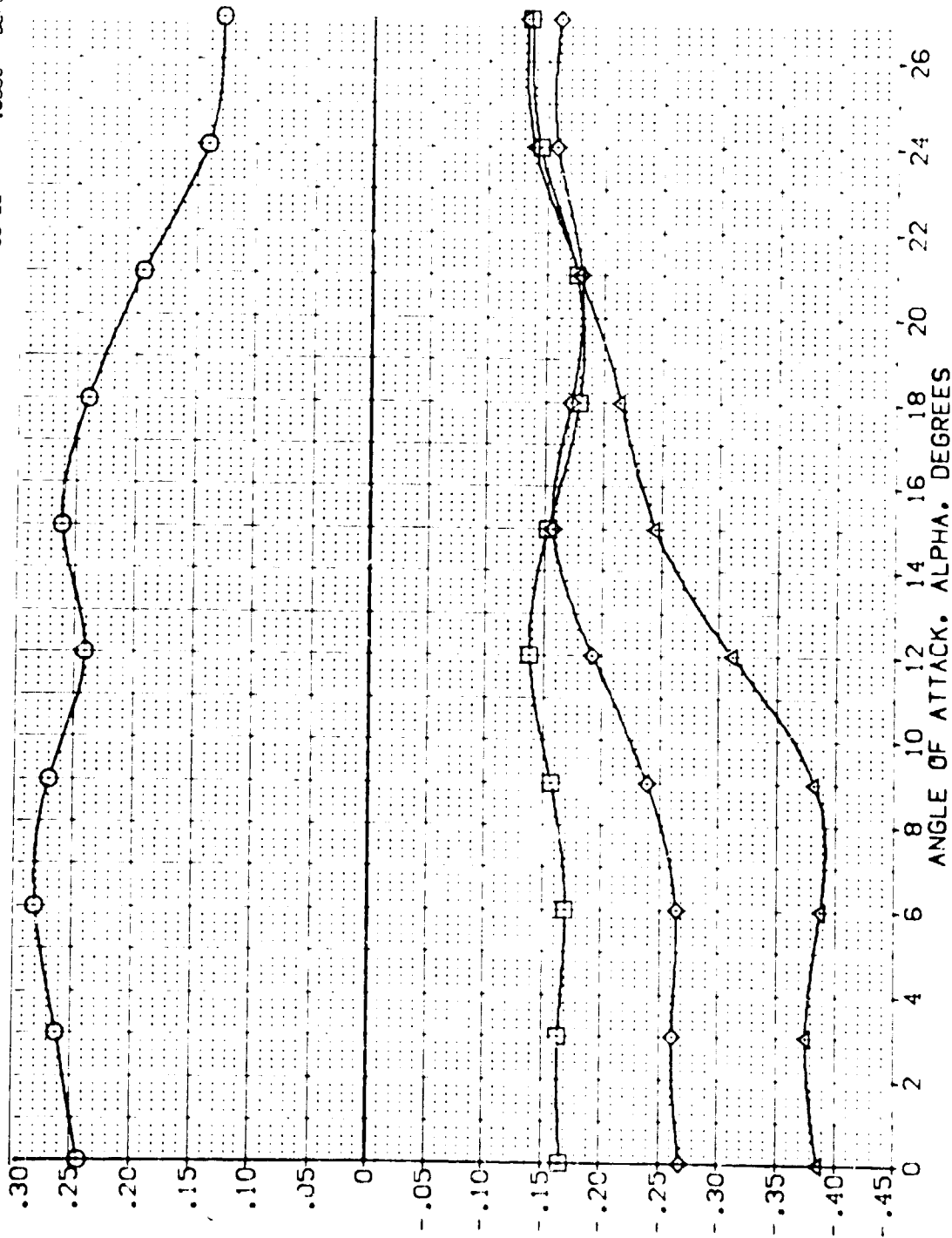


FIG. 7 ELEVON EFFECTS

(B) MACH = .80



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DE	AIL/ON	BOL/LAP	SPO/BRK	REFERENCE INFORMATION
(VEJ000)	ARC 11-747 BA33A B C M F VI V	15.000	.000	-11.700	25.000	SREF 2.4210 50.00
(VEJ007)	ARC 11-747 BA33A B C M F VI V	-10.000	.000	-11.700	25.000	LREF 14.2640
(VEJ019)	ARC 11-747 BA33A B C M F VI V	-20.000	.000	-11.700	25.000	BREF 28.1004
(VEJ023)	ARC 11-747 BA33A B C M F VI V	-40.000	.000	-11.700	25.000	XREF 32.3010
						YREF .0000
						ZREF 11.2500
						SCALE .0300

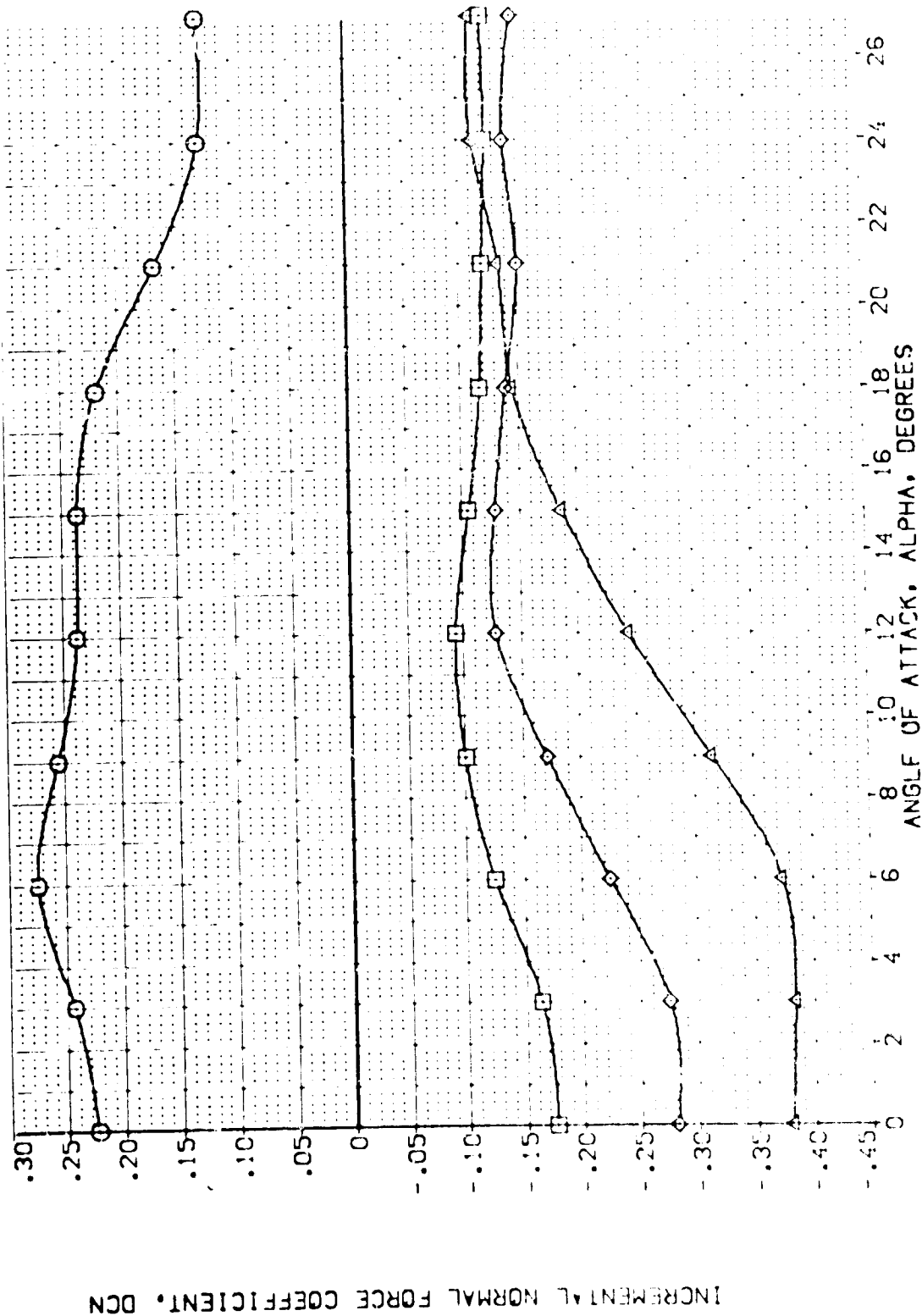


FIG. 7 ELEVON EFFECTS  
(C)MACH = .30

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DE	AILERON	BD FLAP	SPDBRK	REFERENCE INFORMATION
[VEJ003]	ARC 11-747 DA53A B C M F VI V	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[VEJ002]	ARC 11-747 DA53A B C M F VI V	-10.000	.000	-11.700	25.000	LREF 14.2440 IN.
[VEJ019]	ARC 11-747 DA53A B C M F VI V	-20.000	.000	-11.700	25.000	BREF 28.1004 IN.
[VEJ023]	ARC 11-747 DA53A B C M F VI V	-40.000	.000	-11.700	25.000	XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

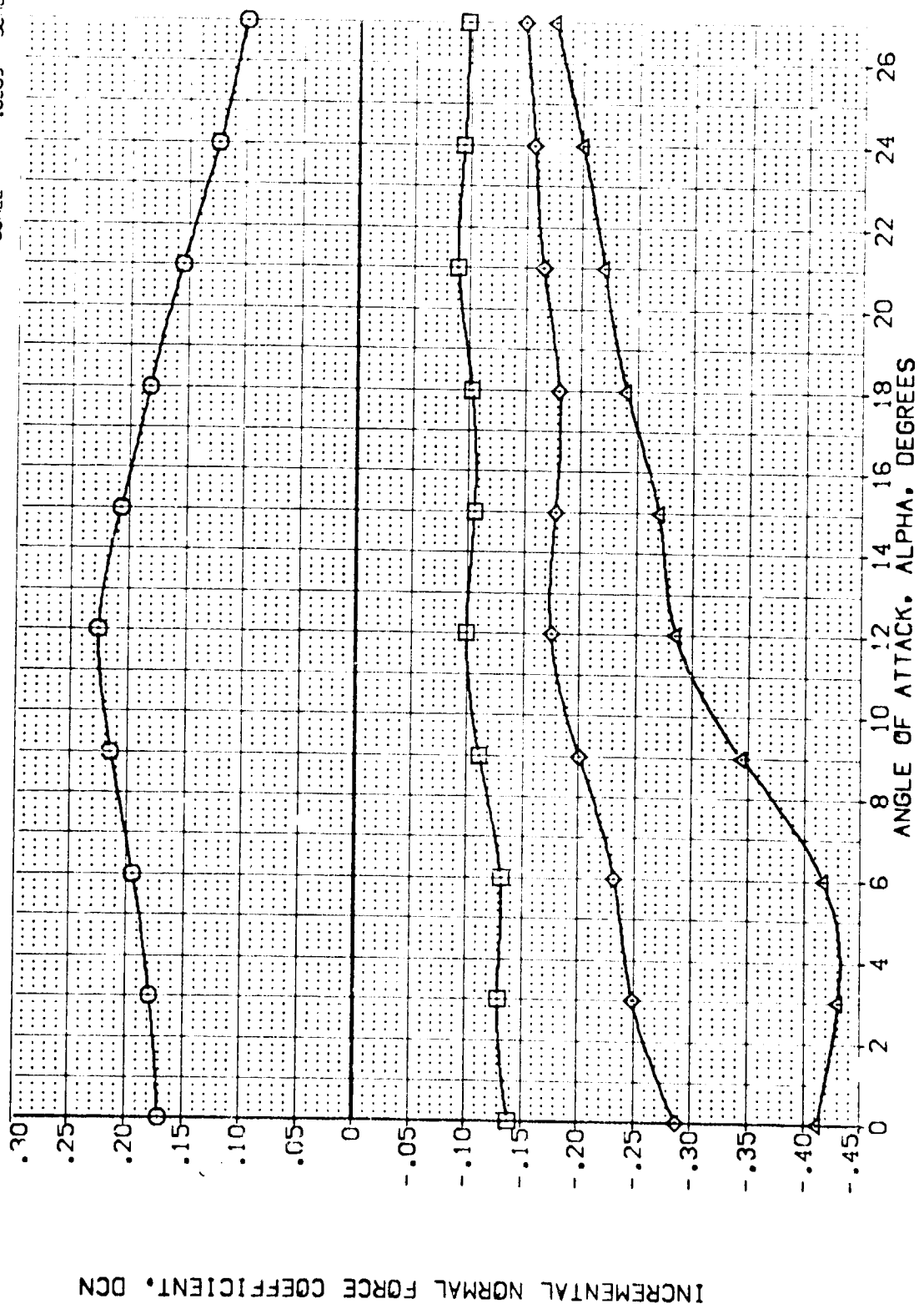


FIG. 7 ELEVON EFFECTS

(C)MACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DE	AILRON	BOFLAP	SPDBRK	REFERENCE INFORMATION
(VEJ003)	ARC 11-747 OAS3A B C M F VI V	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(VEJ002)	ARC 11-747 OAS3A B C M F VI V	-10.000	.000	-11.700	25.000	LREF 14.2440 IN.
(VEJ015)	ARC 11-747 OAS3A B C M F VI V	-20.000	.000	-11.700	25.000	BREF 28.1004 IN.
(VEJ023)	ARC 11-747 OAS3A B C M F VI V	-40.000	.000	-11.700	25.000	XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

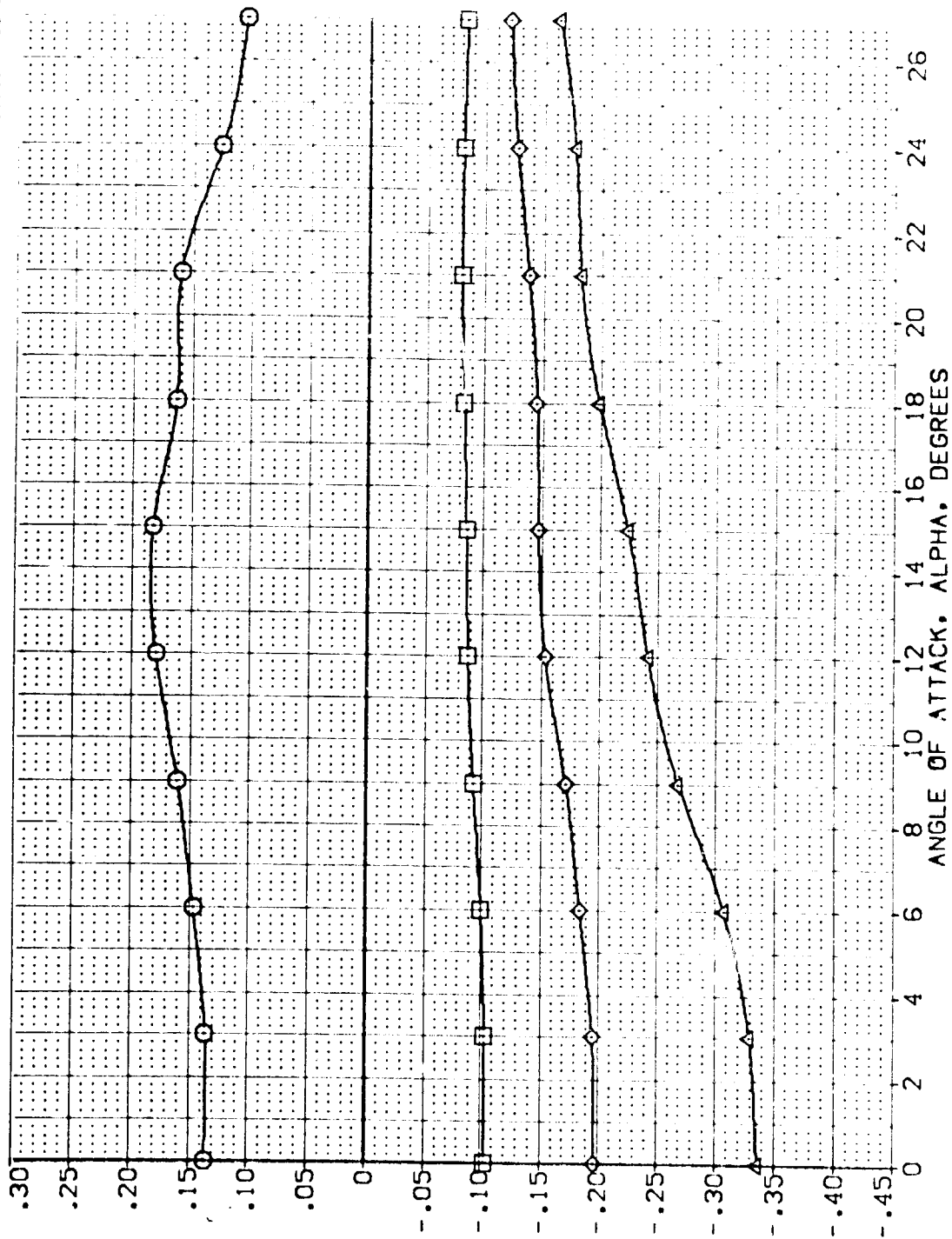


FIG. 7 ELEVON EFFECTS

(E)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DE	AIRLON	BOFLAP	SPOBRK	REFERENCE INFORMATION
(VEJ003)	ARC 11-747 BA53A B C M F VI V	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(VEJ002)	ARC 11-747 BA53A B C M F VI V	-10.000	.000	-11.700	25.000	LREF 14.2440 IN.
(VEJ019)	ARC 11-747 BA53A B C M F VI V	-20.000	.000	-11.700	25.000	BREF 28.1004 IN.
(VEJ023)	ARC 11-747 BA53A B C M F VI V	-40.000	.000	-11.700	25.000	XMRP 32.3013 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

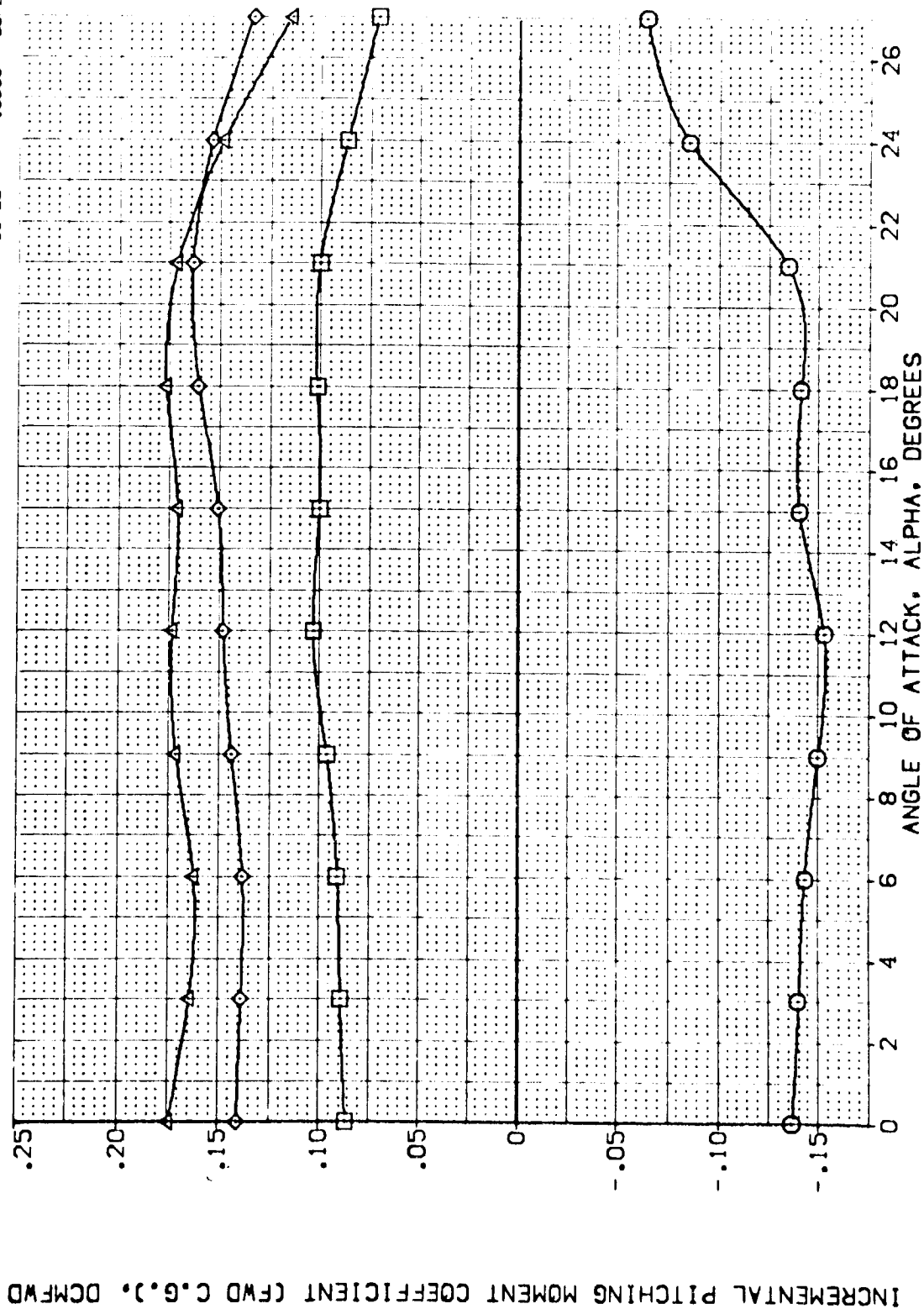


FIG. 7 ELEVON EFFECTS

(A)MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DE	AILRON	BOFLAP	SPDBRK	REFERENCE INFORMATION
[VE1003]	ARC 11-747 DA53A B C M F VI V	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[VE1002]	ARC 11-747 DA53A B C M F VI V	-10.000	.000	-11.700	25.000	LREF 14.2440 IN.
[VE1019]	ARC 11-747 DA53A B C M F VI V	-20.000	.000	-11.700	25.000	BREF 28.1004 IN.
[VE1023]	ARC 11-747 DA53A B C M F VI V	-40.000	.000	-11.700	25.000	YMRP 32.3010 IN.
						ZMRP .0000 IN.
						SCALE 11.2500 IN.
						SCALE .0300

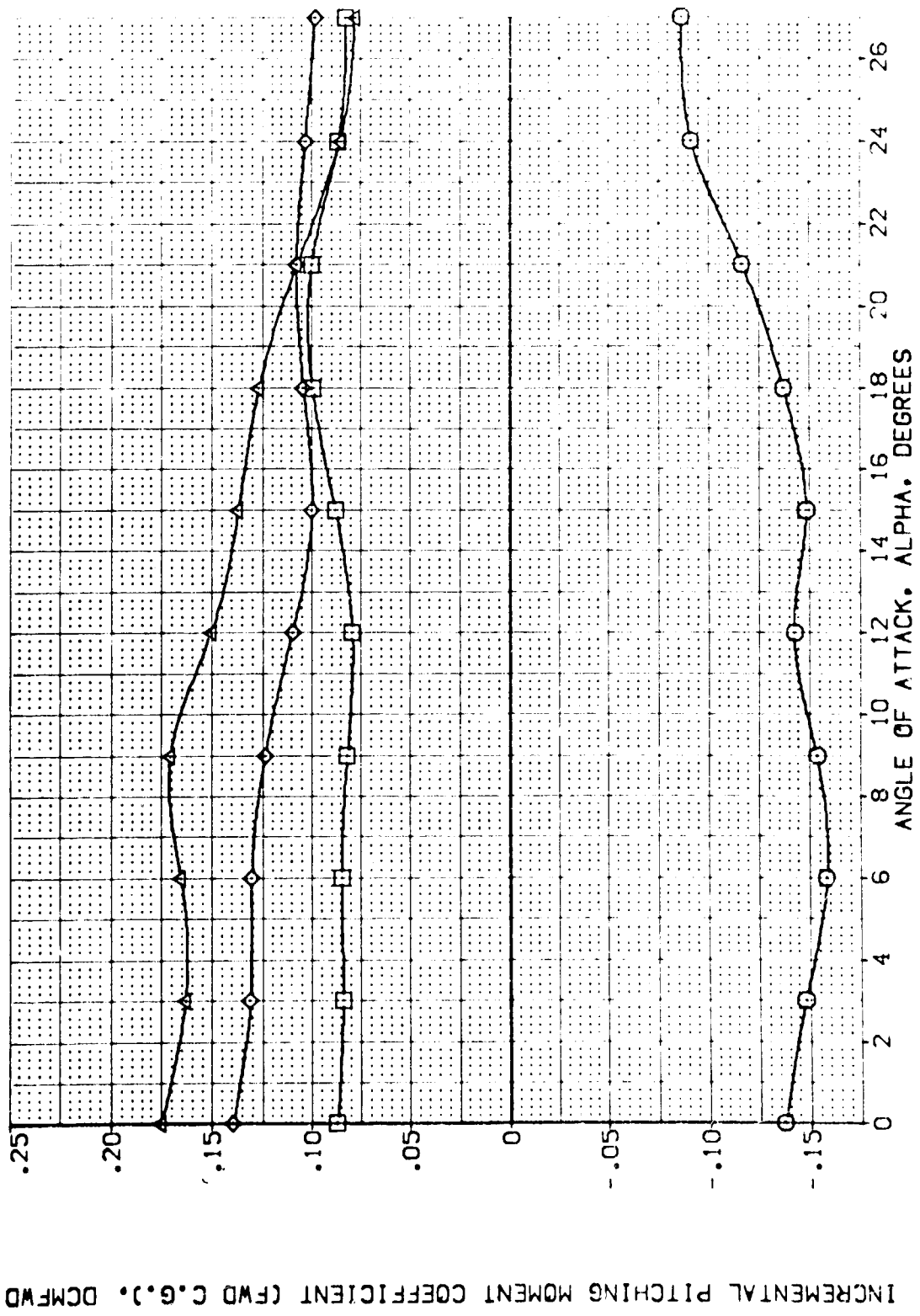


FIG. 7 ELEVON EFFECTS

(B)MACH = .80



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DE	AILERON	BD FLAP	SPOILER	REFERENCE INFORMATION
(VEJ003)	ARC 11-747 DA53A B C H F VI V	15.000	.000	-11.700	25.000	SREF 2.4210 SO. FT.
(VEJ002)	ARC 11-747 DA53A B C H F VI V	-10.000	.000	-11.700	25.000	LREF 14.2440 IN.
(VEJ019)	ARC 11-747 DA53A B C H F VI V	-20.000	.000	-11.700	25.000	BREF 28.1004 IN.
(VEJ023)	ARC 11-747 DA53A B C H F VI V	-40.000	.000	-11.700	25.000	XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

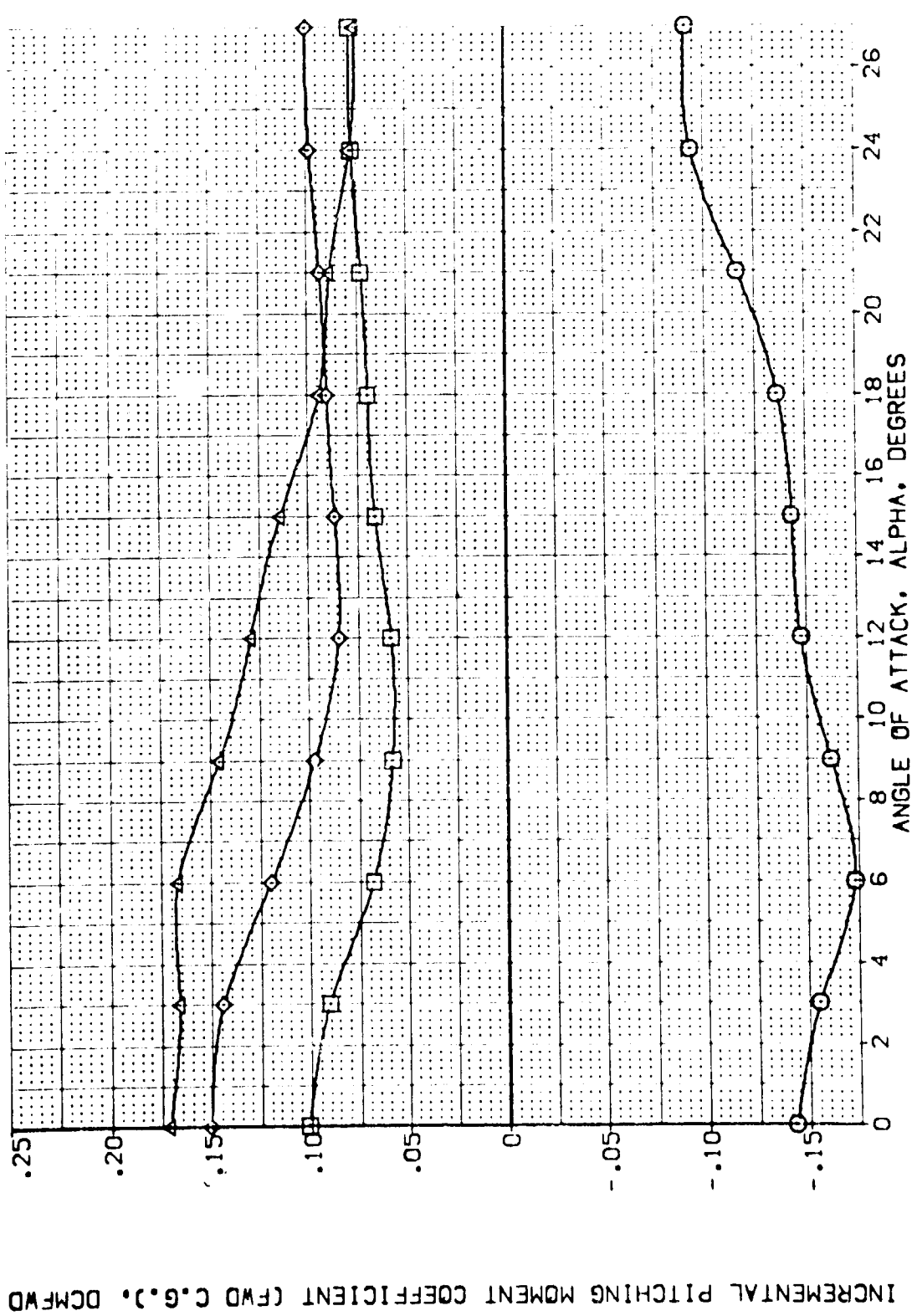


FIG. 7 ELEVON EFFECTS

(C)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DE	AILRON	BOFLAP	SPOBRK	REFERENCE INFORMATION
(VE1003)	ARC 11-747 DA53A B C M F V	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(VE1002)	ARC 11-747 DA53A B C M F V	-10.000	.000	-11.700	25.000	LREF 14.2440
(VE1019)	ARC 11-747 DA53A B C M F V	-20.000	.000	-11.700	25.000	BREF 28.1004
(VE1023)	ARC 11-747 DA53A B C M F V	-40.000	.000	-11.700	25.000	XMRP 32.3010
						YMRP .0000
						ZMRP .0000
						SCALE 11.2500
						SCALE .0300

INCREMENTAL PITCHING MOMENT COEFFICIENT (FWD C.G.), DCMFWD

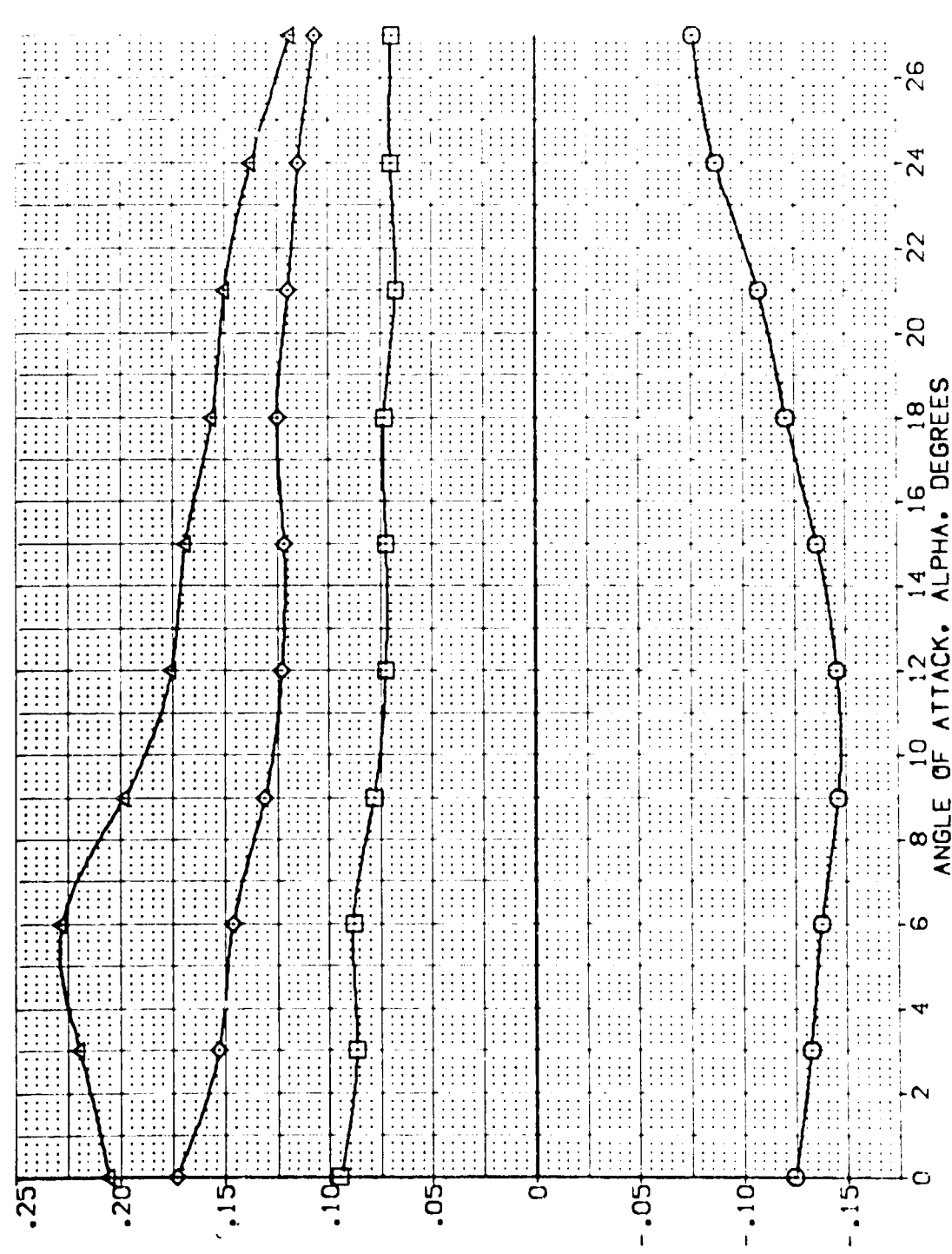


FIG. 1 ELEVON EFFECTS

(D)MACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DE	AILRON	BDF LAP	SPDRBK	REFERENCE INFORMATION
(VEJ003)	ARC 11-747 OAS3A B C M F V	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(VEJ002)	ARC 11-747 OAS3A B C M F V	-10.000	.000	-11.700	25.000	LREF 14.2440 IN.
(VEJ019)	ARC 11-747 OAS3A B C M F V	-20.000	.000	-11.700	25.000	BREF 28.1004 IN.
(VEJ023)	ARC 11-747 OAS3A B C M F V	-40.000	.000	-11.700	25.000	XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP .0000 IN.
						SCALE 11.2500
						SCALE .0300

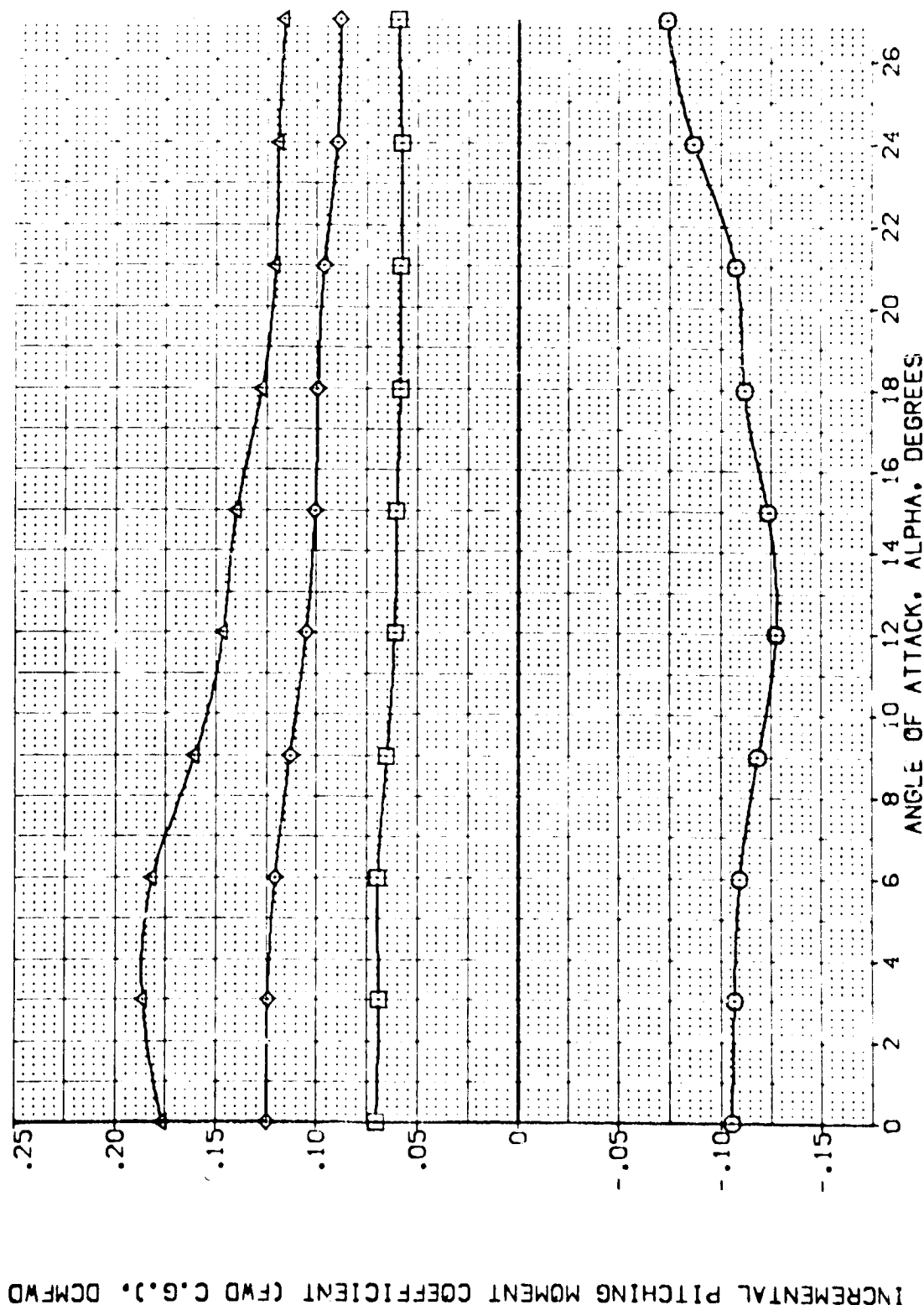


FIG. 7 ELEVON EFFECTS

(E)MACH = 1.20





DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DE	AILRON	BDFLAP	SPDBRK	REFERENCE INFORMATION
(VEJ003)	ARC 11-747 OAS3A B C H F VI V	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(VEJ002)	ARC 11-747 OAS3A B C H F VI V	-10.000	.000	-11.700	25.000	LREF 14.2440 IN.
(VEJ019)	ARC 11-747 OAS3A B C H F VI V	-20.000	.000	-11.700	25.000	BREF 28.1004 IN.
(VEJ023)	ARC 11-747 OAS3A B C H F VI V	-40.000	.000	-11.700	25.000	XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

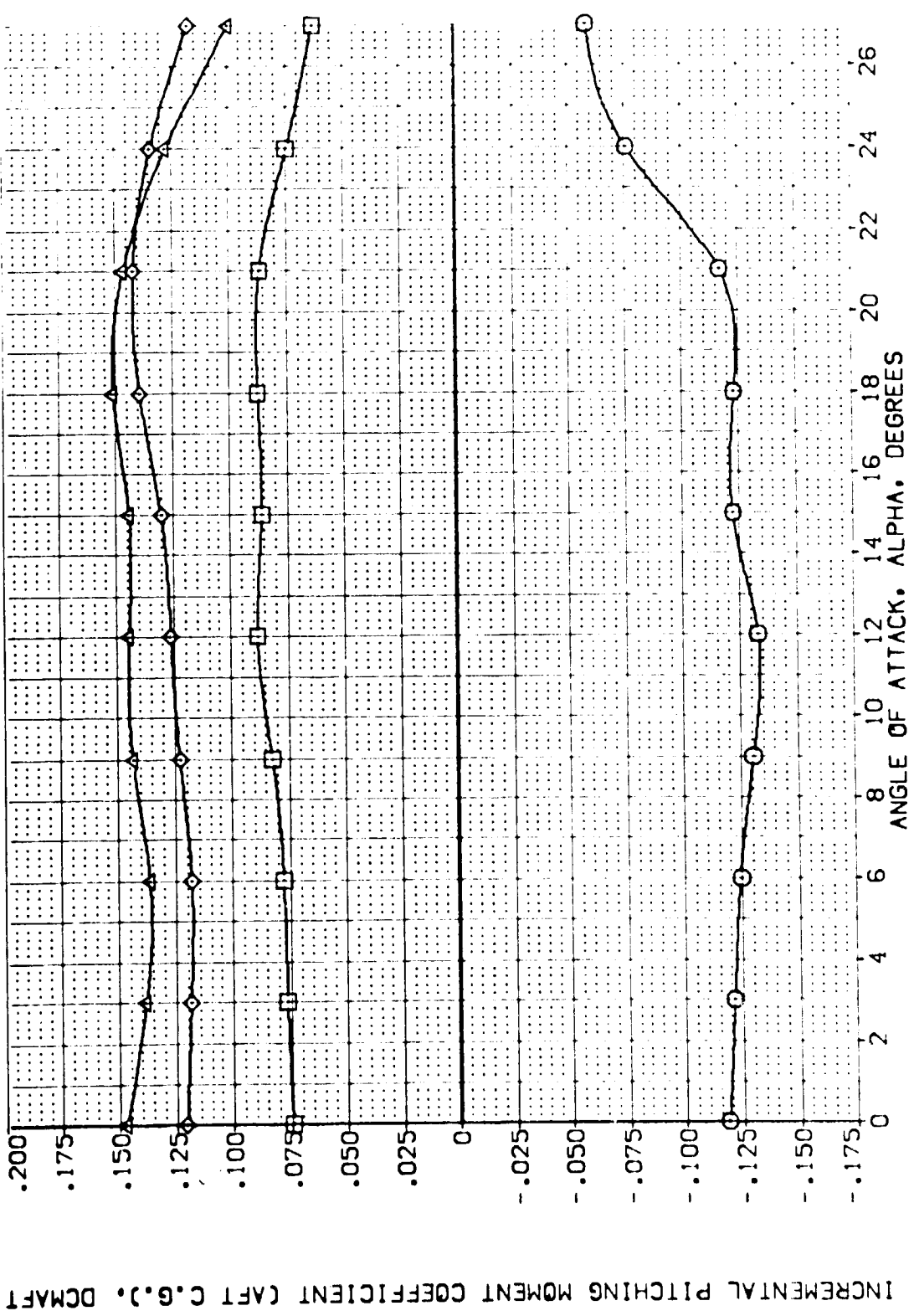


FIG. 7 ELEVON EFFECTS

(M)MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DE	AILRON	BD/LAP	SPOBRK	REFERENCE INFORMATION
(VEJ003)	ARC 11-747 OAS3A B C M F VI V	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(VEJ002)	ARC 11-747 OAS3A B C M F VI V	-10.000	.000	-11.700	25.000	LREF 14.2440 IN.
(VEJ019)	ARC 11-747 OAS3A B C M F VI V	-20.000	.000	-11.700	25.000	BREF 28.1004 IN.
(VEJ023)	ARC 11-747 OAS3A B C M F VI V	-40.000	.000	-11.700	25.000	XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

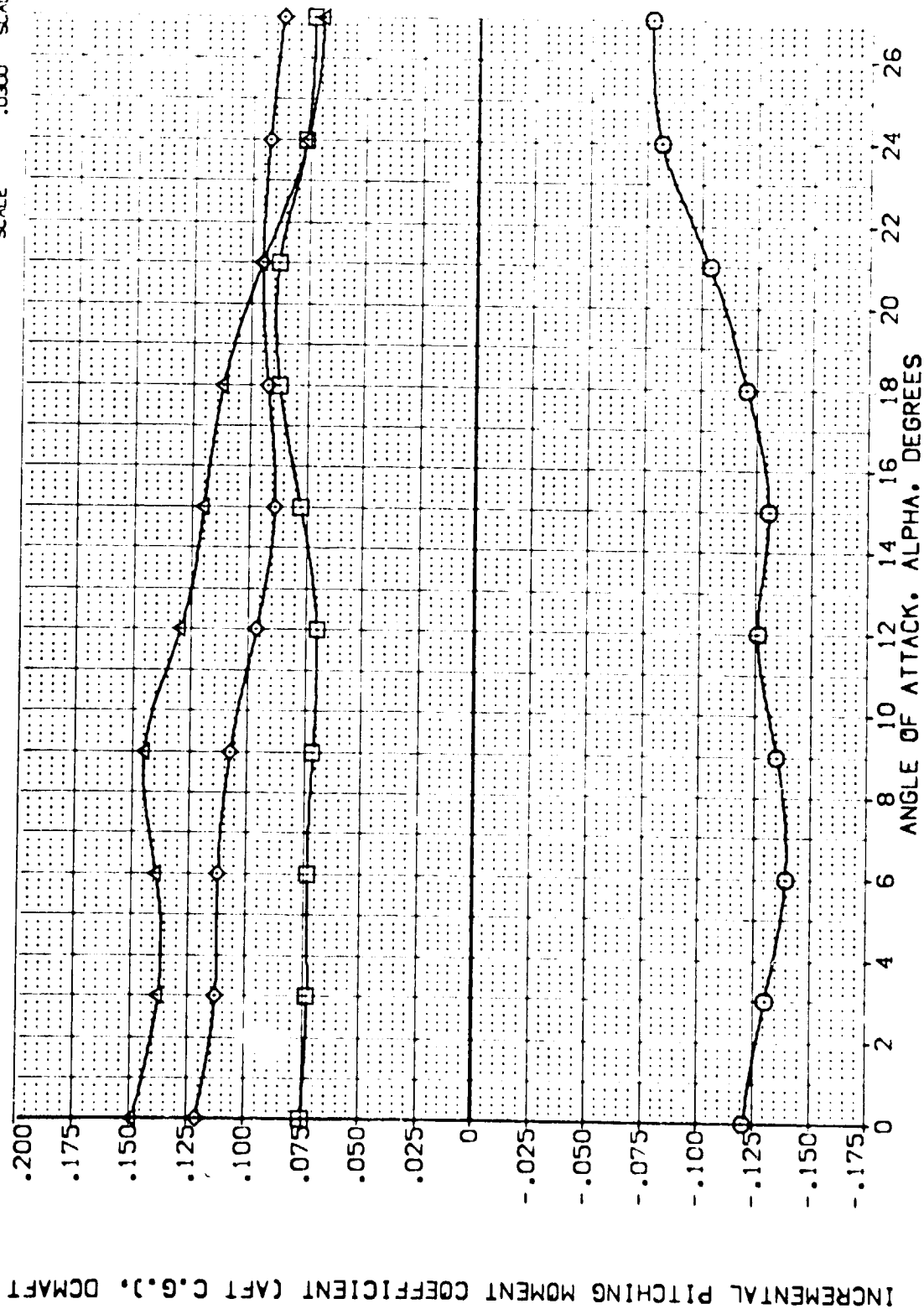


FIG. 7 ELEVON EFFECTS

(B)MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DE	AIRLON	BOFLAP	SPDRBK	REFERENCE INFORMATION
(VEJ003)	ARC 11-747 OA53A B C H F VI V	15.000	.000	-11.700	25.000	SREF 2.4210 SC.FT.
(VEJ002)	ARC 11-747 OA53A B C H F VI V	-10.000	.000	-11.700	25.000	LREF 14.2440 IN.
(VEJ019)	ARC 11-747 OA53A B C H F VI V	-20.000	.000	-11.700	25.000	BREF 28.1004 IN.
(VEJ023)	ARC 11-747 OA53A B C H F VI V	-40.000	.000	-11.700	25.000	XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

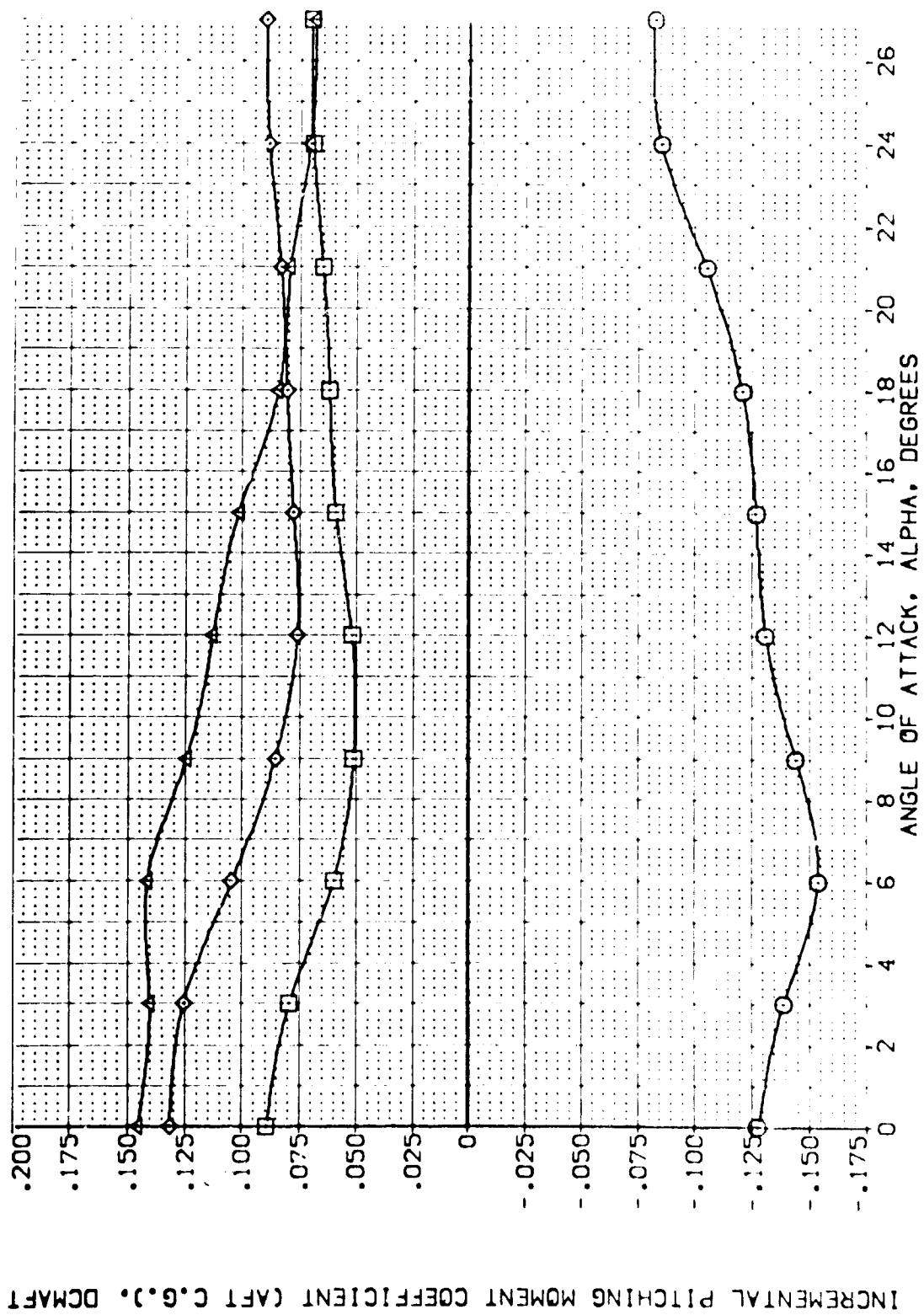


FIG. 7 ELEVON EFFECTS

(C)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DE	AIRLN	BDFLAP	SPDRBK	REFERENCE INFORMATION
(VEJ003)	ARC 11-747 OAS3A B C H F VI V	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(VEJ002)	ARC 11-747 OAS3A B C H F VI V	-10.000	.000	-11.700	25.000	LREF 14.2440
(VEJ019)	ARC 11-747 OAS3A B C H F VI V	-20.000	.000	-11.700	25.000	BREF 28.1004
(VEJ023)	ARC 11-747 OAS3A B C H F VI V	-40.000	.000	-11.700	25.000	XMRP 32.3010
						YMRP .0000
						ZMRP 11.2500
						SCALE .0300

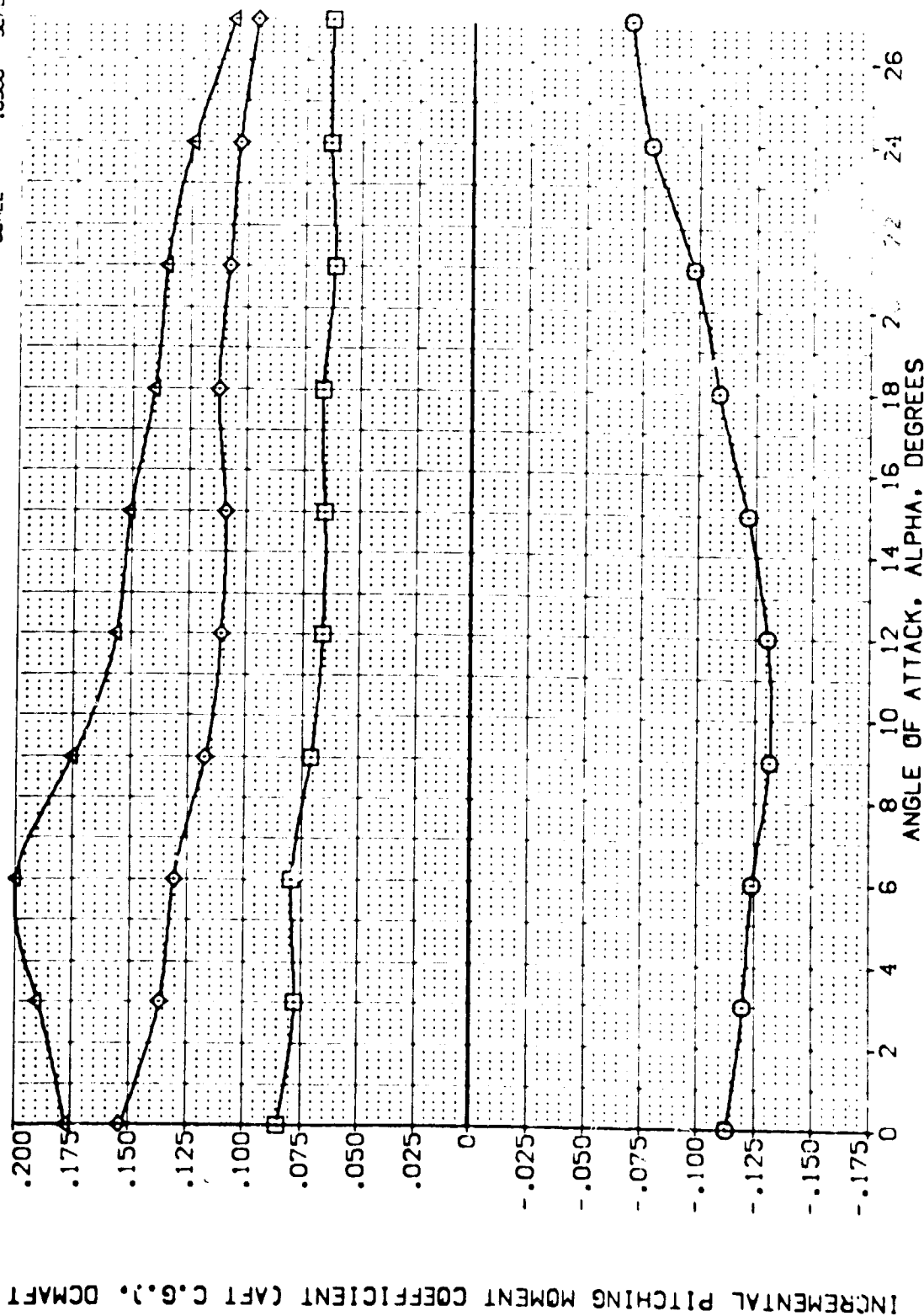


FIG. 7 ELEVON EFFECTS

(C)MACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DE	AIRLON	BOFLAP	SPOBRK	REFERENCE INFORMATION
(VEJ003)	ARC 11-747 GA53A B C H F VI V	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(VEJ002)	ARC 11-747 GA53A B C H F VI V	-10.000	.000	-11.700	25.000	LREF 14.2440 IN.
(VEJ019)	ARC 11-747 GA53A B C H F VI V	-20.000	.000	-11.700	25.000	BREF 28.1004 IN.
(VEJ023)	ARC 11-747 GA53A B C H F VI V	-40.000	.000	-11.700	25.000	XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

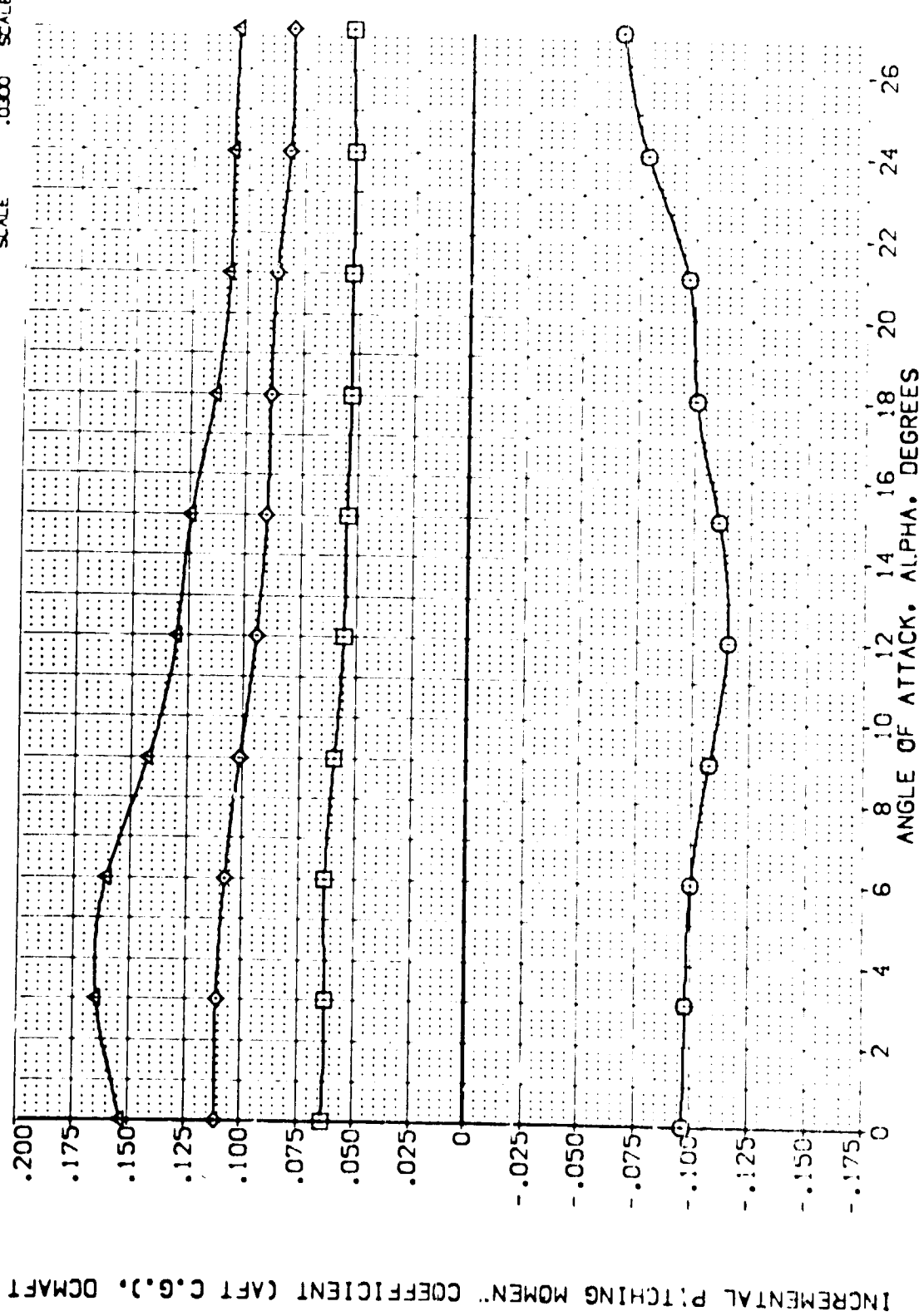


FIG. 7 ELEVON EFFECTS

(E)MACH = 1.20

ARC 11-747 CA53A B C M F W1 V NOM. RN/L (TEJ016)

SYMBOL	MACH	BETA	AILRON	SPDRN	ELEV-L	PARAMETRIC VALUES	REF	SCALE
○	.597	.000	.000	.000	.000	ELEVON	SREF	2.4110
□	.601	.000	.000	.000	.000	BOFLAP	LREF	14.2410
◇	.900	.000	.000	.000	.000	RUDDER	BREF	28.1014
△	1.047	.000	.000	.000	.000	ELEV-R	XMRP	32.3017
▽	1.203	.000	.000	.000	.000		YMRP	.0000
							ZMRP	11.2500
							SCALE	.0000

REFERENCE INFORMATION	
SREF	2.4110
LREF	14.2410
BREF	28.1014
XMRP	32.3017
YMRP	.0000
ZMRP	11.2500
SCALE	.0000

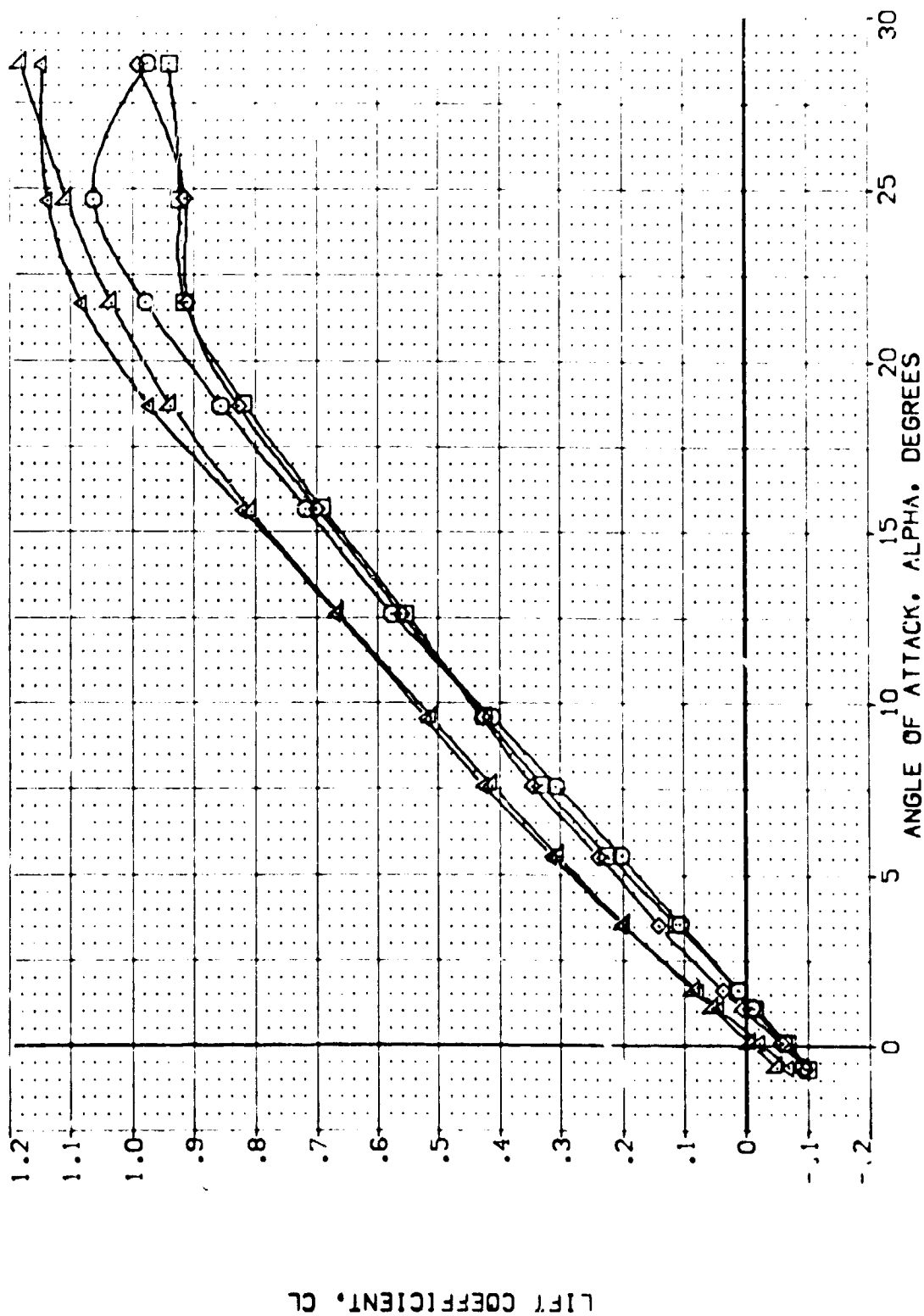


FIG. 7 ELEVON EFFECTS

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (TEJ016)

SYMBOL  
 ○ □ ◇ △

MACH  
 .597  
 .801  
 .900  
 1.047  
 1.203

BETA  
 AILRON  
 SPOBRK  
 ELEV-L

PARAMETRIC VALUES  
 .000 ELEVON  
 .000 BOFLAP  
 25.000 RUDDER  
 .000 ELEV-R

REFERENCE INFORMATION  
 SREF 2.4210 SQ.FT.  
 LREF 14.2440 IN.  
 BREF 28.1004 IN.  
 XMRP 32.9010 IN.  
 YMRP .0000 IN.  
 ZMRP 11.2500 IN.  
 SCALE .0300

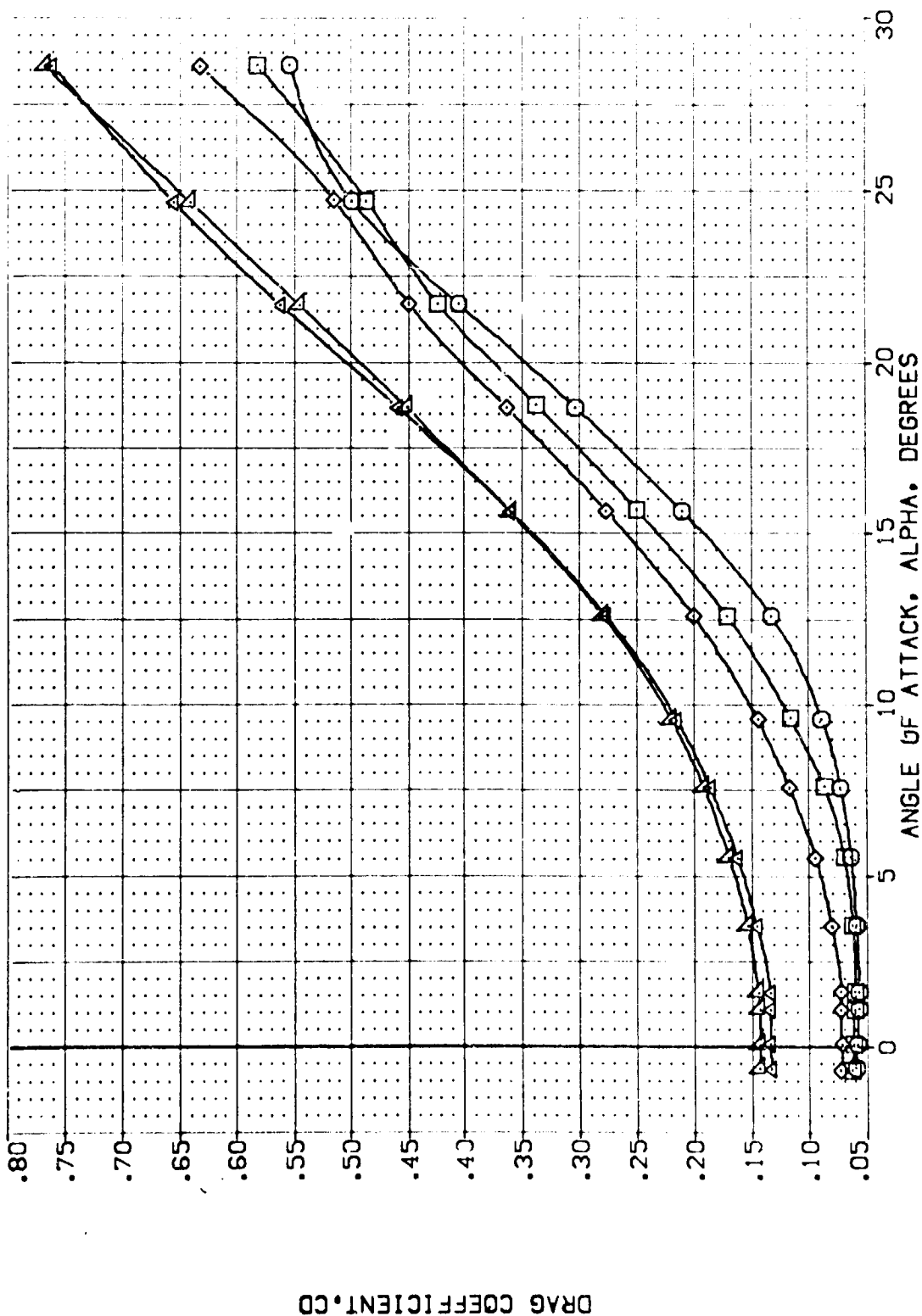


FIG. 7 ELEVON EFFECTS

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (TEJ016)

SYMBOL	MACH	BETA	PARAMETRIC VALUES	REFERENCE INFORMATION
□	.597	.000	ELEVON	SREF 2.4210 SQ.FT.
◇	.801	.000	BOFLAP	LREF 14.2440 IN.
△	.900	.000	RUDDER	BREF 28.1004 IN.
▽	1.047	.000	ELEV-L	XMRP 32.3010 IN.
	1.203		ELEV-R	YMRP 11.2500 IN.
				ZMRP .0300 IN.
				SCALE

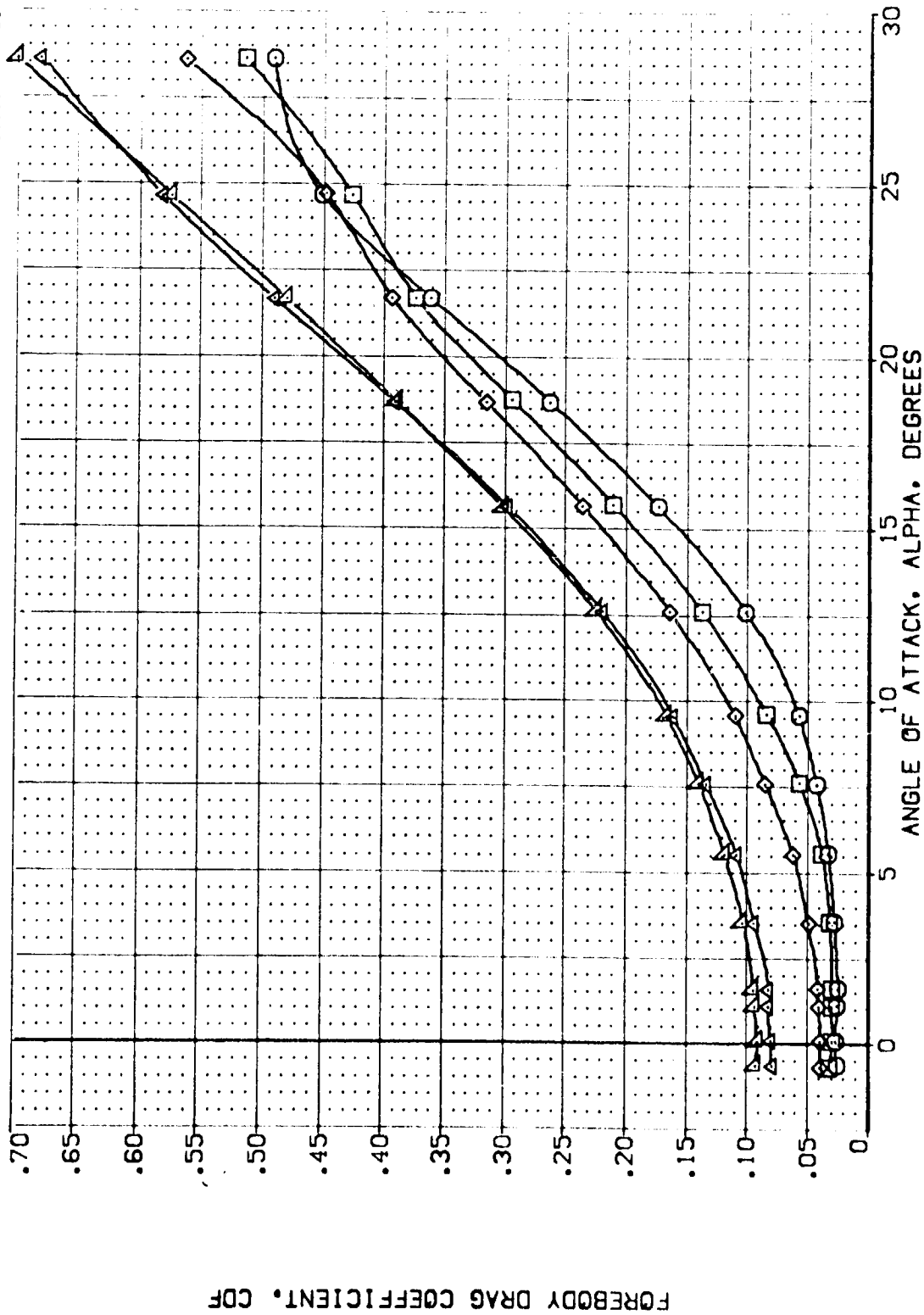


FIG. 7 ELEVON EFFECTS



ARC 11-747 0A53A B C M F W1 V NOM. RN/L (TEJ016)

REFERENCE INFORMATION  
 SREF 2.4210 SC.FT.  
 LREF 14.2440 IN.  
 BREF 28.1004 IN.  
 XMRP 32.3010 IN.  
 YMRP .0000 IN.  
 ZMRP 11.2500 IN.  
 SCALE .0300

PARAMETRIC VALUES  
 BETA .000 ELEVON .000  
 AILRON .000 BOFLAP .000  
 SPOBRK 25.000 RUDDER .000  
 ELEV-L .000 ELEV-R .000

MACH  
 .597  
 .801  
 .900  
 1.047  
 1.203

SYMBOL  
 □  
 ◇  
 △  
 ○

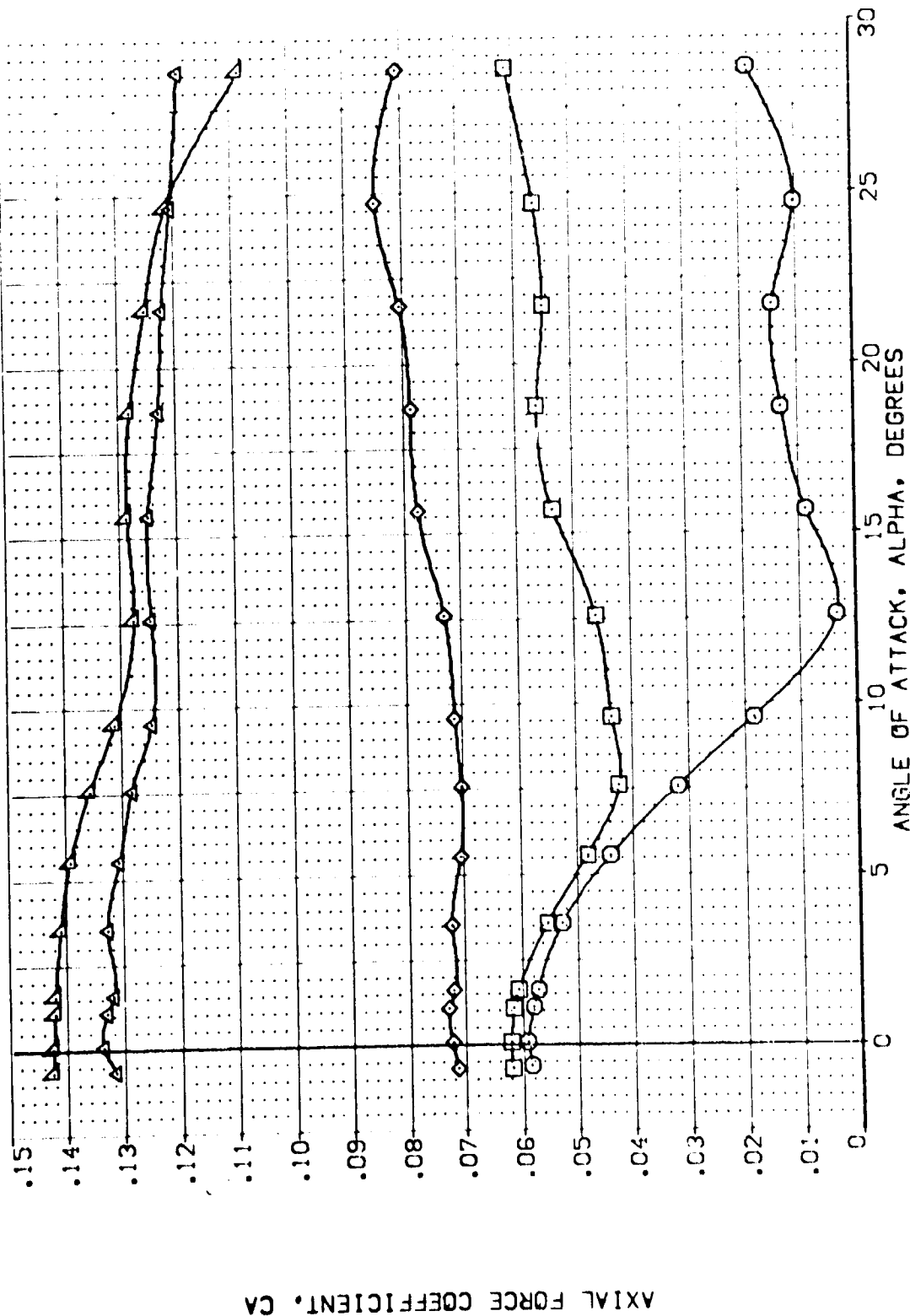


FIG. 7 ELEVON EFFECTS

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (TEJ016)

WACH	BETA	PARAMETRIC VALUES	REFERENCE INFORMATION
.587	.000	ELEVON	SREF 2.4210
.801	.000	BOFLAP	LREF 14.2440
.900	.000	RUDDER	BREF 28.1004
1.047	.000	ELEV-L	YREF 32.3010
1.203	.000	ELEV-R	ZREF 11.2500
			SCALE .0300

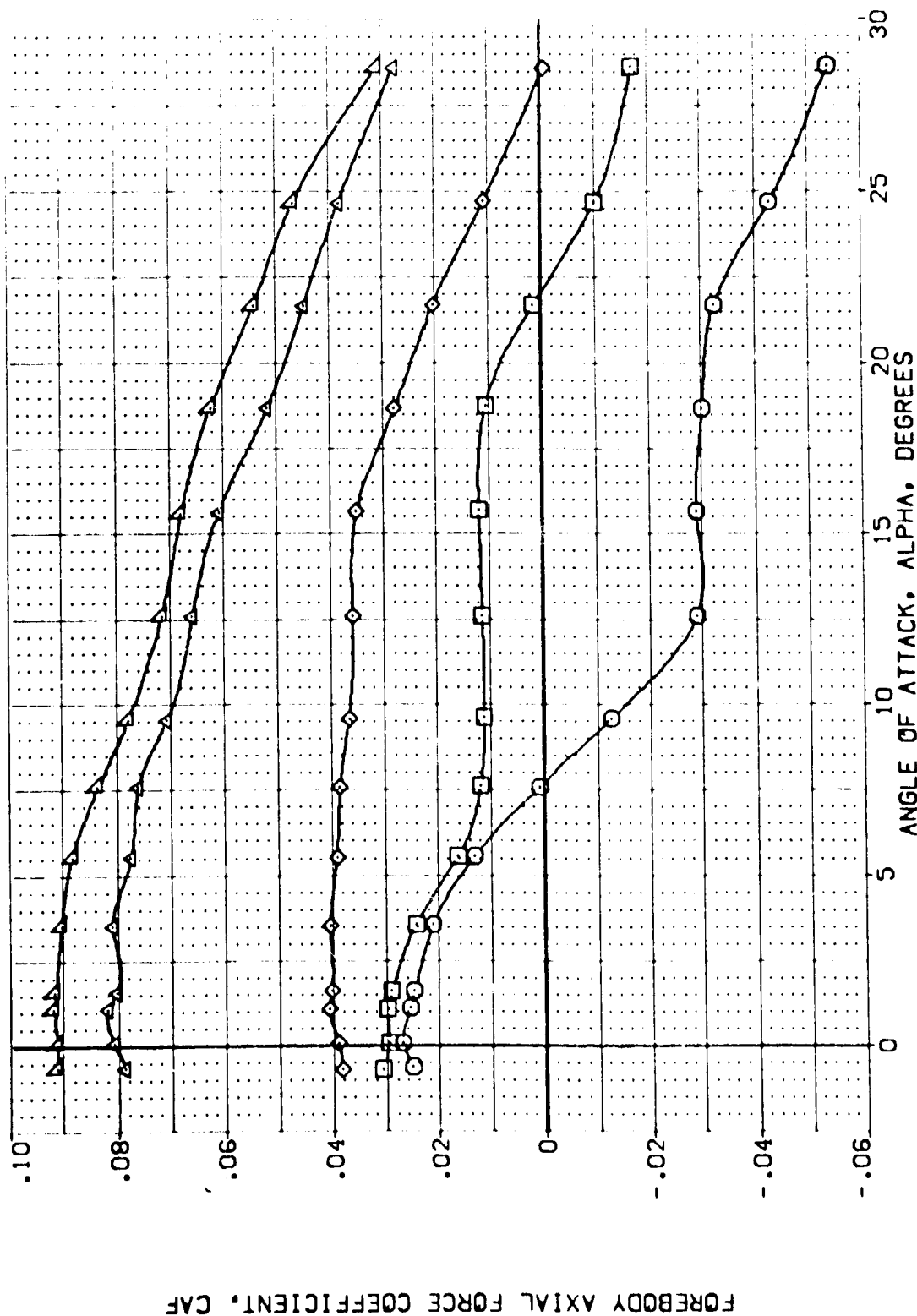


FIG. 7 ELEVON EFFECTS

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (TEJ016)

SYMBOL  
 ○ □ ◇ △

MACH  
 .597  
 .801  
 .900  
 1.047  
 1.203

BETA  
 AILRON  
 SPOBRK  
 ELEV-L

PARAMETRIC VALUES  
 .000  
 .000  
 25.000  
 .000

ELEVON  
 BOFLAP  
 RUDDER  
 ELEV-R

REFERENCE INFORMATION  
 SREF 2.4210 SQ.FT.  
 LREF 14.2440 IN.  
 BREF 28.1004 IN.  
 XMRP 32.3010 IN.  
 YMRP 11.0000 IN.  
 ZMRP 11.2500 IN.  
 SCALE .0300

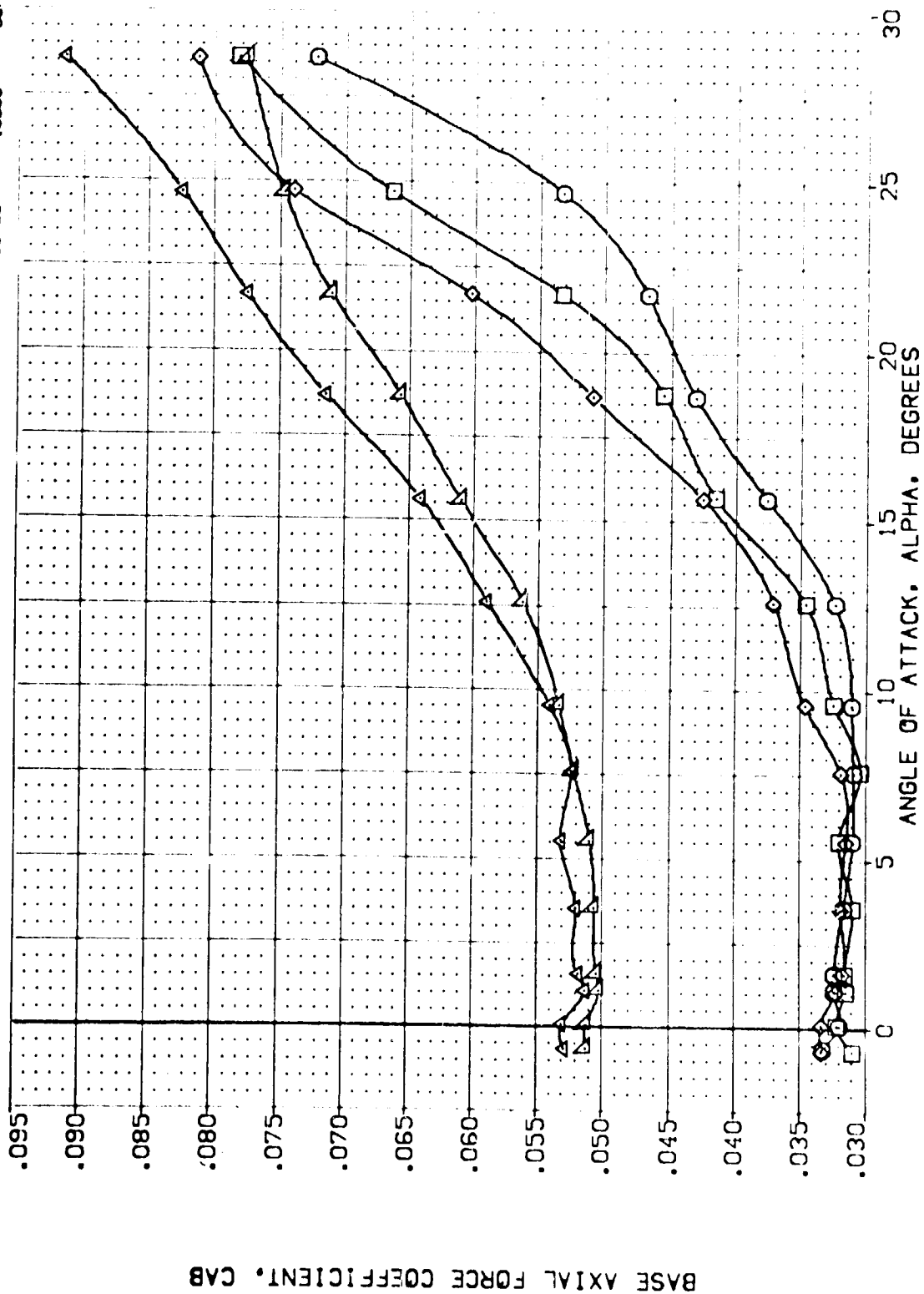


FIG. 7 ELEVON EFFECTS

(TEJ016)

ARC 11-747 0A53A B C M F W1 V NOM. RN/L

SYMBOL  
 ▽  
 □  
 ◇  
 △

PARAMETRIC VALUES  
 BETA .000 ELEVON .000  
 AILRON .000 EDFLAP .000  
 SPOBRK 25.000 RUDDER .000  
 ELEV-L .000 ELEV-R .000

REFERENCE INFORMATION  
 SREF 2.4210 SQ.FT.  
 LREF 14.2440 IN.  
 BREF 28.1004 IN.  
 XMRP 32.3010 IN.  
 YMRP .0000 IN.  
 ZMRP 11.2500 IN.  
 SCALE .0300

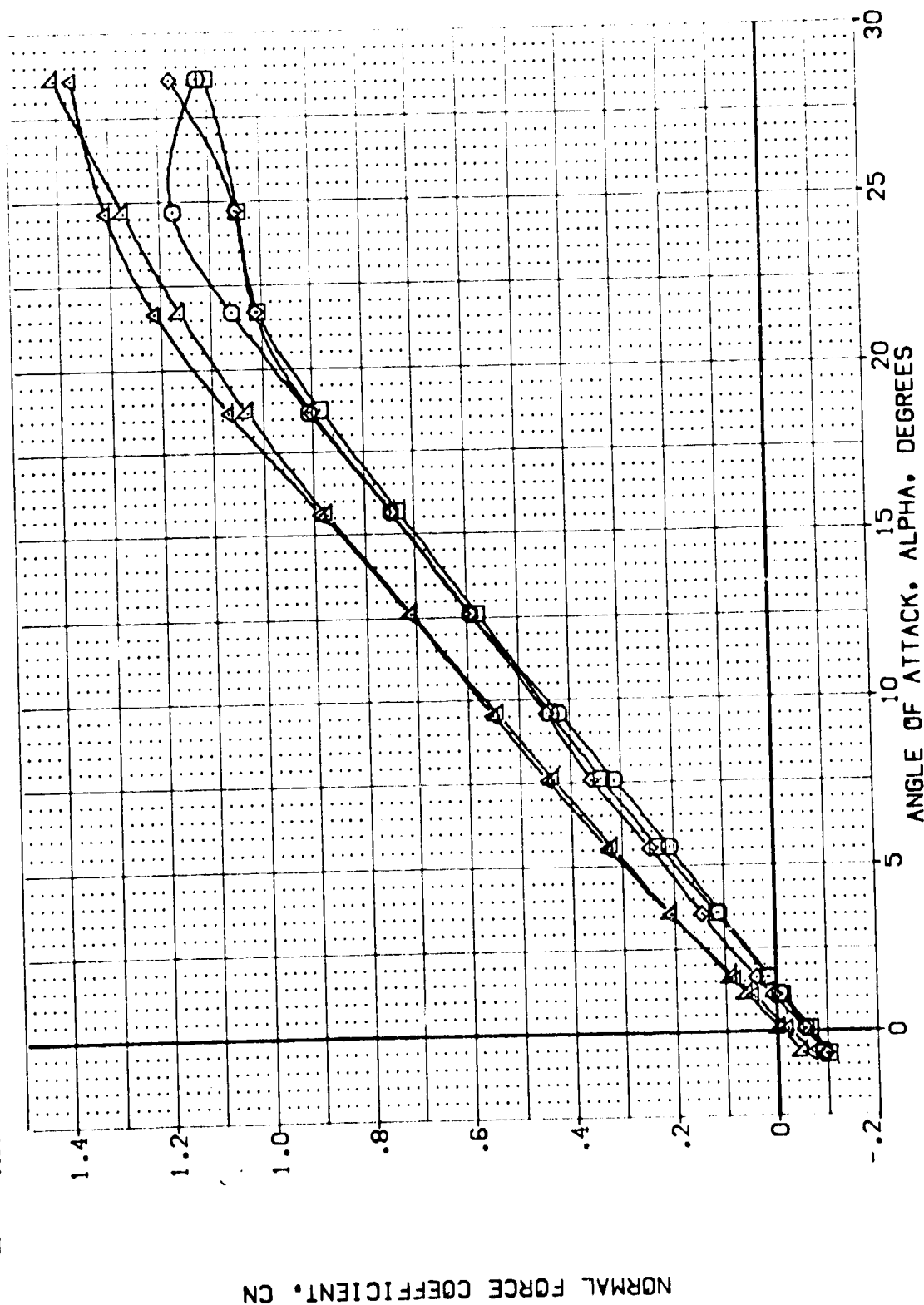


FIG. 7 ELEVON EFFECTS

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (TEJ016)

SYMBOL  
 △  
 ◇  
 □  
 ○

MACH  
 .587  
 .801  
 .900  
 1.047  
 1.203

BETA  
 .000  
 .000  
 .000  
 .000  
 .000

PARAMETRIC VALUES  
 ELEVON  
 BOFLAP  
 RUDDER  
 ELEV-R

REFERENCE INFORMATION  
 SREF 2.4210 SQ.FT.  
 LREF 14.2 IN.  
 BREF 28.1 IN.  
 XPRP 32.3010 IN.  
 YPRP .0000 IN.  
 ZPRP 11.2500 IN.  
 SCALE .0300

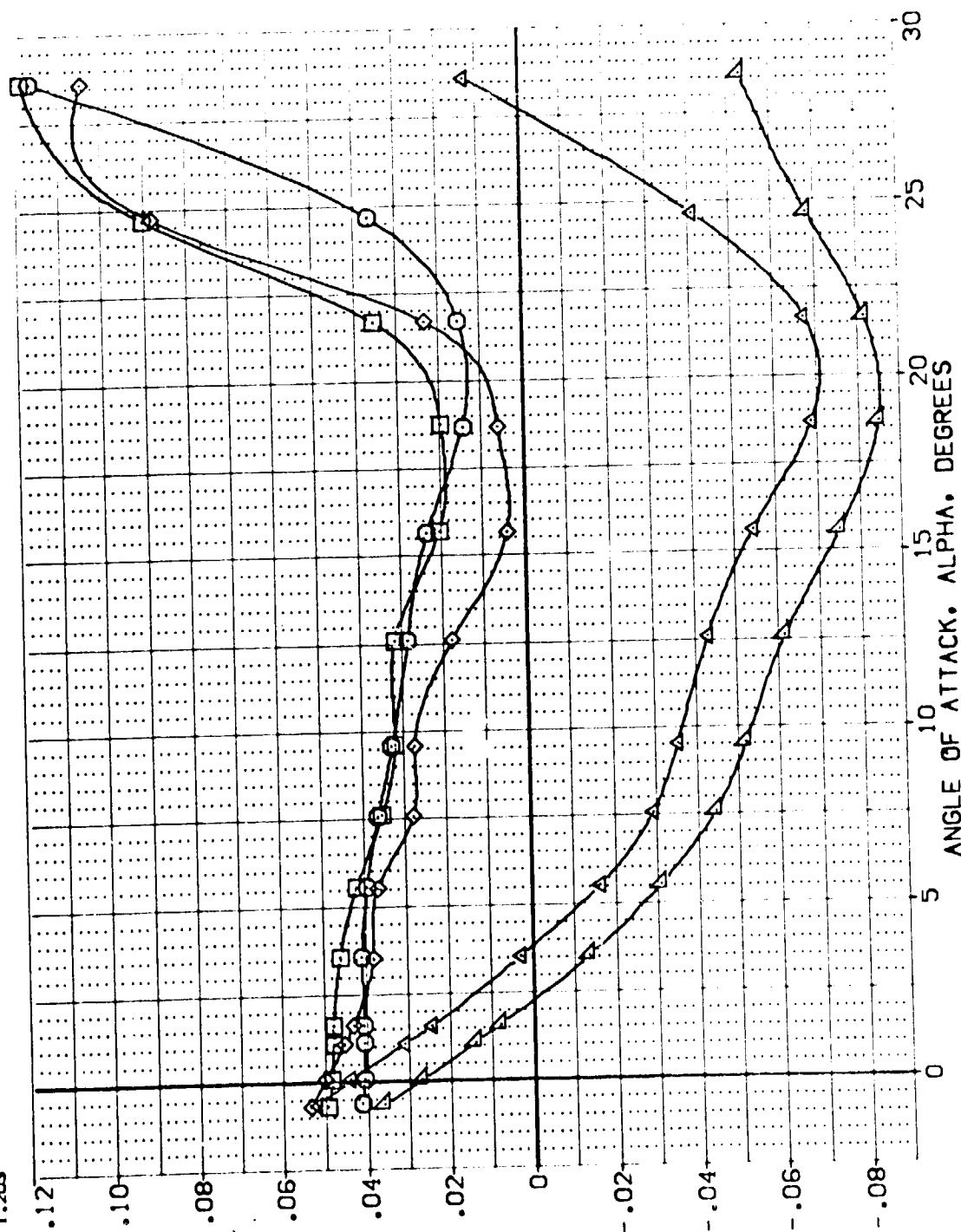


FIG. 7 ELEVON EFFECTS

(TEJ016)

NOM. RN/L

V

F

M

C

B

A

0A53A

ARC 11-747

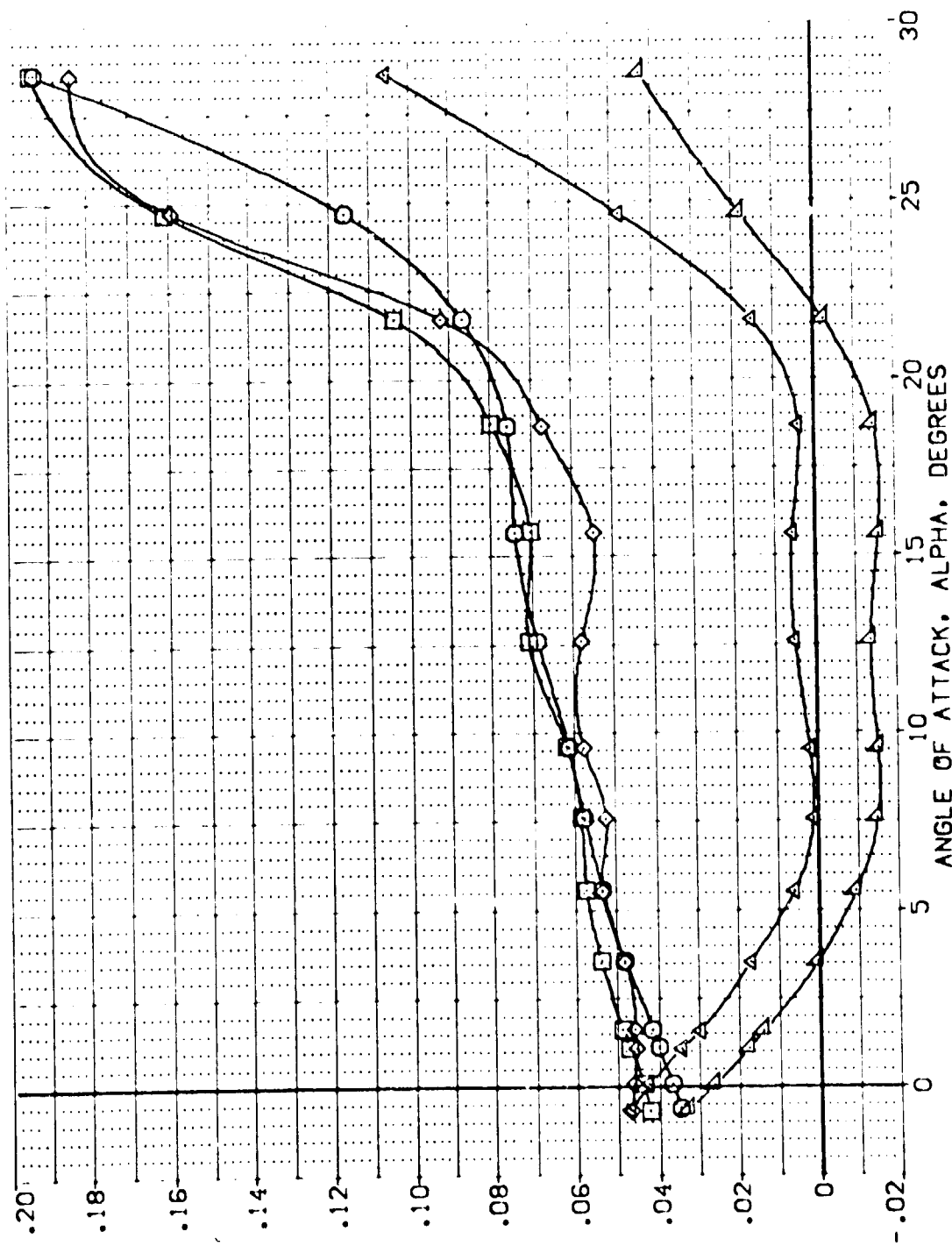
MACH

SYMBOL  
□  
◇  
△  
▽

BETA  
AILLON  
SPORR  
ELEV-L  
.587  
.801  
.900  
1.047  
1.203

PARAMETRIC VALUES  
ELEVON  
BOFLAP  
RUDDER  
ELEV-R  
.000  
.000  
25.000  
.000  
.000  
.000

REFERENCE INFORMATION  
SREF  
LREF  
BREF  
XREF  
YREF  
ZREF  
SCALE  
2.4210  
14.2440  
28.1004  
32.3010  
11.2500  
11.2500  
10000



PITCHING MOMENT COEFFICIENT (CFT C.G.), CLMFT

FIG. 7 ELEVON EFFECTS

[TEJ016]

ARC 11-747 0A53A B C M F W1 V NOM. RN/L

REFERENCE INFORMATION  
 SREF 2.4210 SQ.FT.  
 LREF 14.2440  
 BREF 28.1004  
 YMRP 32.3010  
 ZMRP .0000  
 SCALE 11.2500  
 SCALE .0300

PARAMETRIC VALUES

BETA .000 ELEVON .000  
 AILERON .000 BOFLAP .000  
 SPOBRK 25.000 RUDDER .000  
 ELEV-L .000 ELEV-R .000

MACH  
 .597  
 .801  
 .900  
 1.047  
 1.203

SYMBOL  
 ○ □ ◇ △

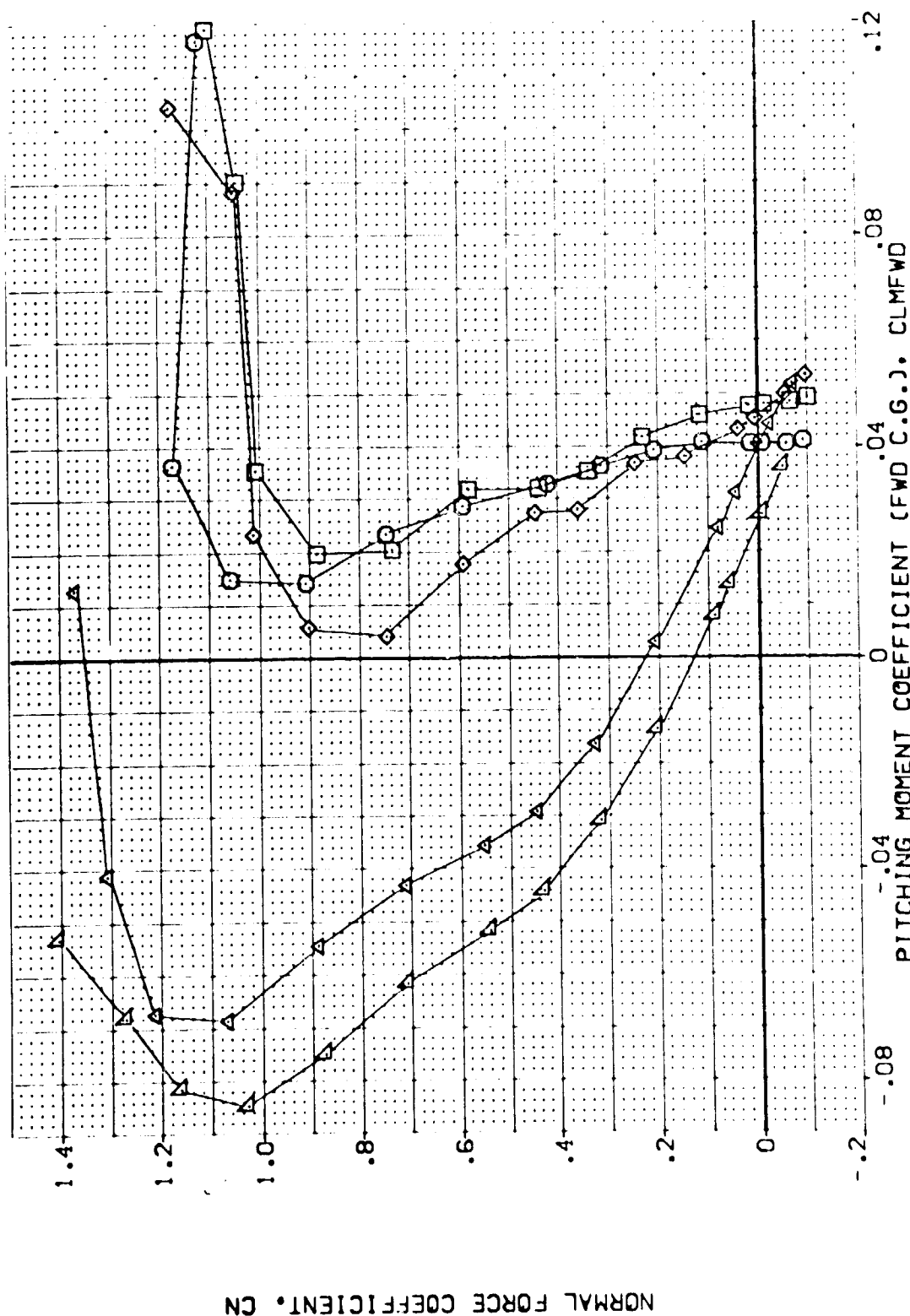


FIG. 7 ELEVON EFFECTS

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (TEJ016)

SYMBOL	MACH	BETA	AILRON	SPDRK	ELEV-L	PARAETRIC VALUES	ELEVON	BOFLAP	RUDDER	ELEV-R	SREF	LREF	BREF	XMRP	YMRP	ZMRP	SCALE	REFERENCE INFORMATION	SO.FT.
○	.587	.000	.000	.000	.000	.000	.000	.000	.000	.000	2.4210	14.2440	28.1004	32.3010	.0000	.0000	.0300	IN.	
□	.801	.000	.000	.000	.000	.000	.000	.000	.000	.000	14.2440	28.1004	32.3010	.0000	.0000	.0000	.0300	IN.	
◇	.900	.000	.000	.000	.000	.000	.000	.000	.000	.000	14.2440	28.1004	32.3010	.0000	.0000	.0000	.0300	IN.	
△	1.047	.000	.000	.000	.000	.000	.000	.000	.000	.000	14.2440	28.1004	32.3010	.0000	.0000	.0000	.0300	IN.	
▽	1.203	.000	.000	.000	.000	.000	.000	.000	.000	.000	14.2440	28.1004	32.3010	.0000	.0000	.0000	.0300	IN.	

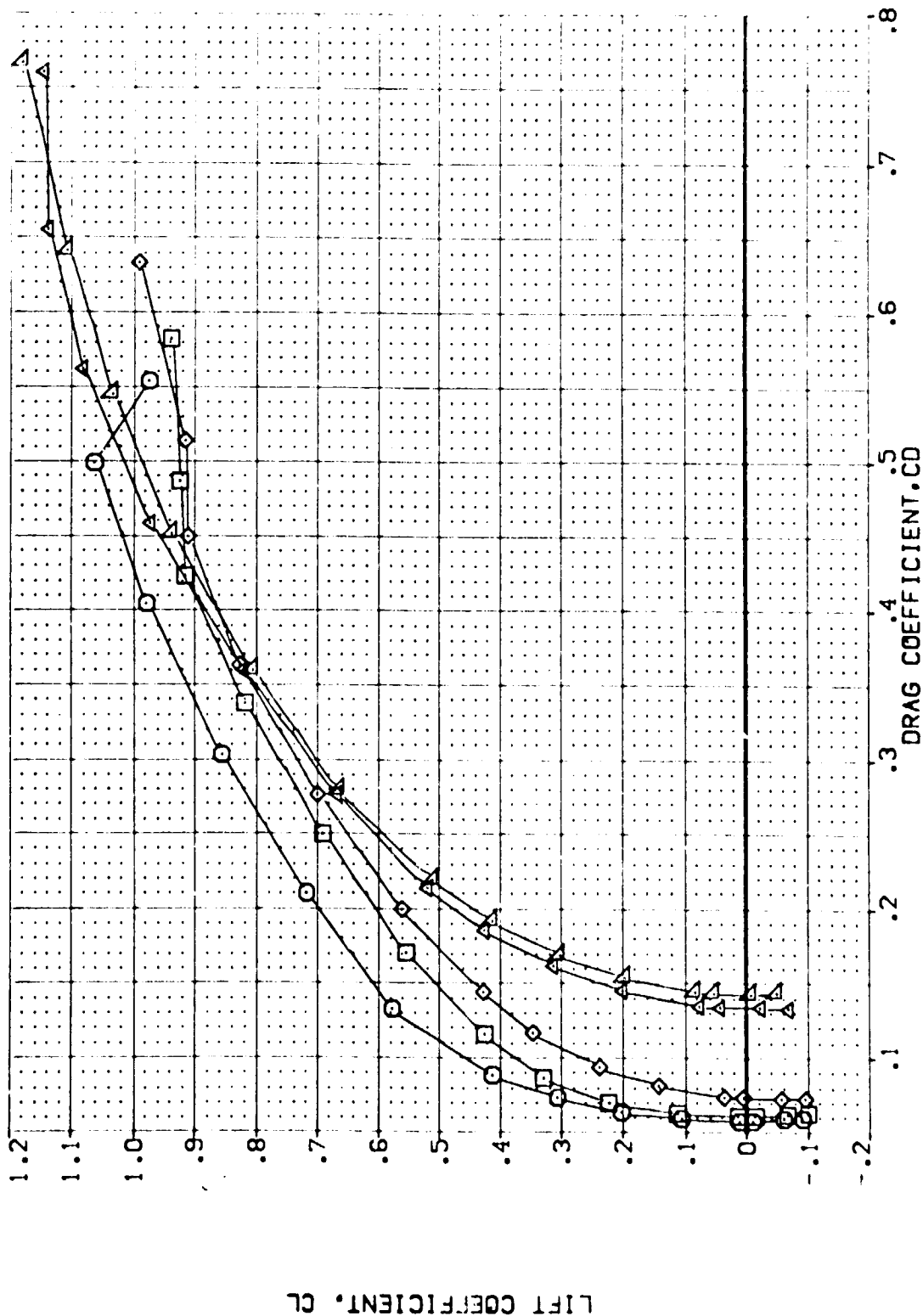


FIG. 7 ELEVON EFFECTS



ARC 11-747 0A53A B C M F W I V NOM. RN/L (TEJ016)

SYMBOL MACH

PARAMETRIC VALUES	BETA	ELEVON
0	.597	.000
□	.801	.000
◇	.900	.000
△	1.047	.000
▽	1.203	.000

REFERENCE INFORMATION

SRF	SQ.FT.
LR	2.4210
SR	14.2440
XR	28.1004
YR	32.3010
ZR	11.2500
SCALE	.0300

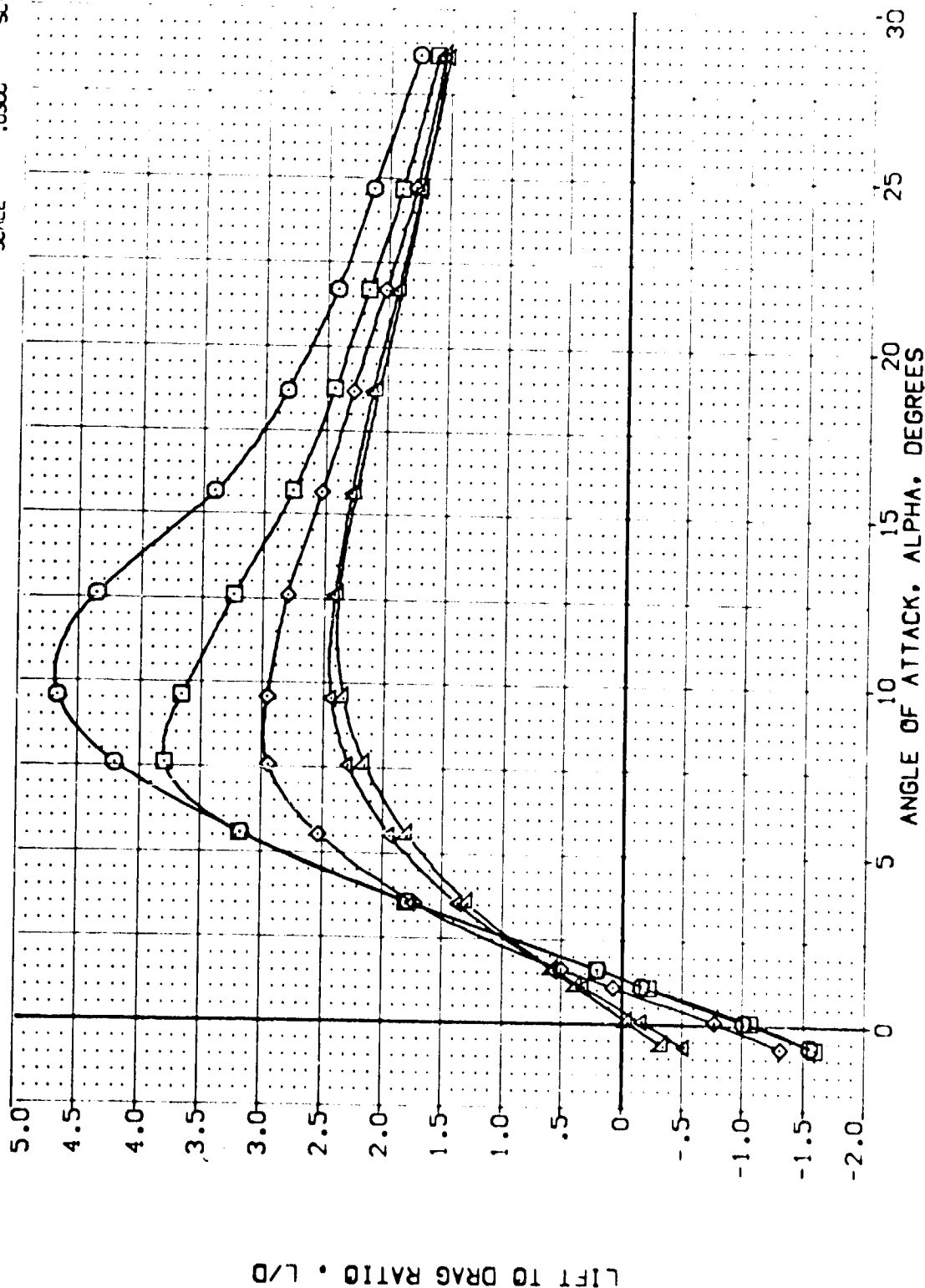


FIG. 7 ELEVON EFFECTS

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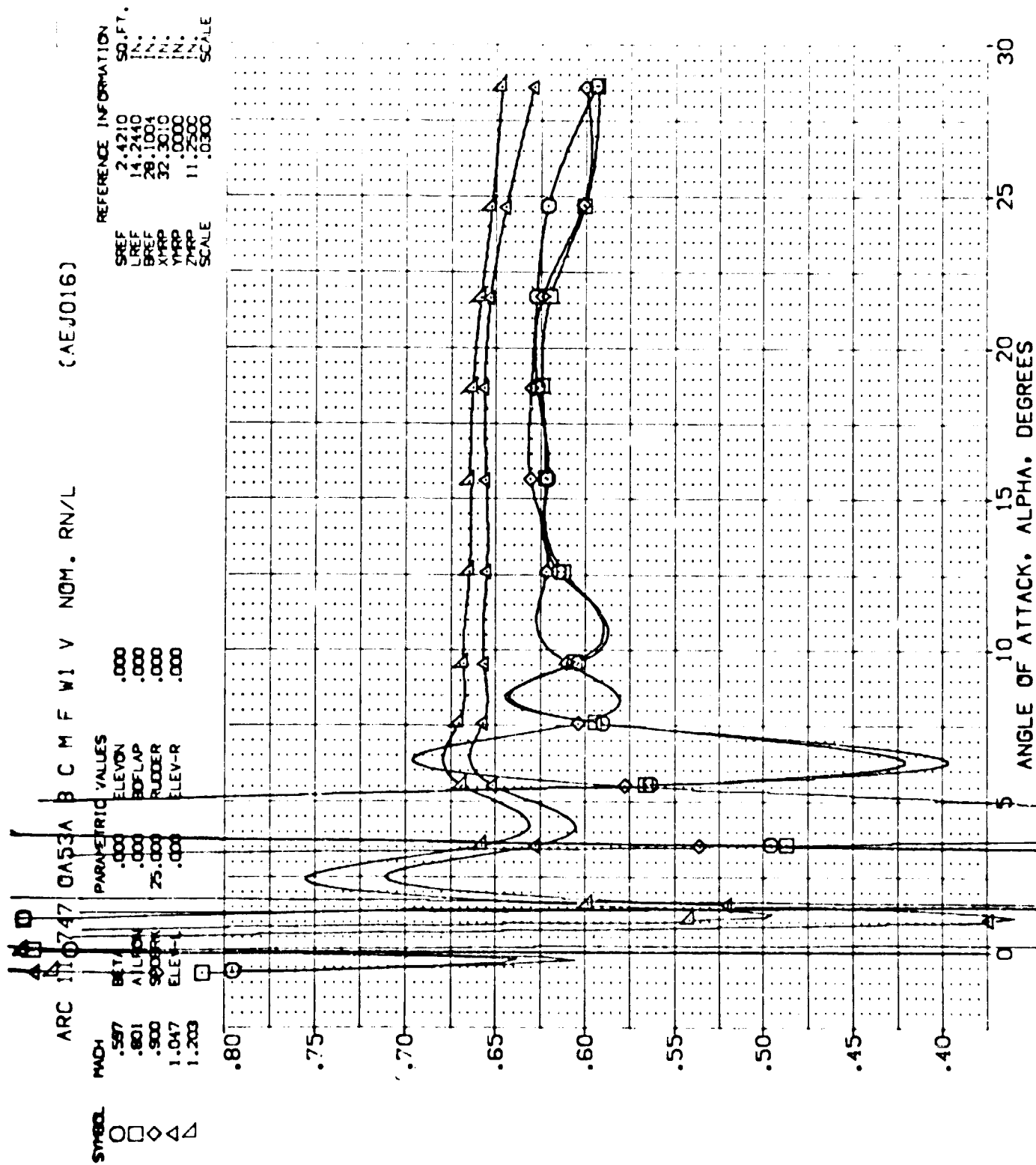


FIG. 7. ELEVEN EFFECTS

DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 (TEJ010) ARC 11-747 OAS3A B C M F VI V NOM: RV/L  
 (TEJ015) ARC 11-747 OAS3A B C M F VI V NOM: RV/L  
 (TEJ011) ARC 11-747 OAS3A B C M F VI V NOM: RV/L

ELEVON AILRON BODYFLAP SPODBK  
 .000 .000 16.300 25.000  
 .000 .000 .000 25.000  
 .000 .000 -11.700 25.000

REFERENCE INFORMATION  
 SREF 2.4210 50.FT.  
 LREF 14.2440 IN.  
 BREF 28.1004 IN.  
 XMRP 32.3010 IN.  
 YMRP .0000 IN.  
 ZMRP 11.2500 IN.  
 SCALE .0300 SCALE

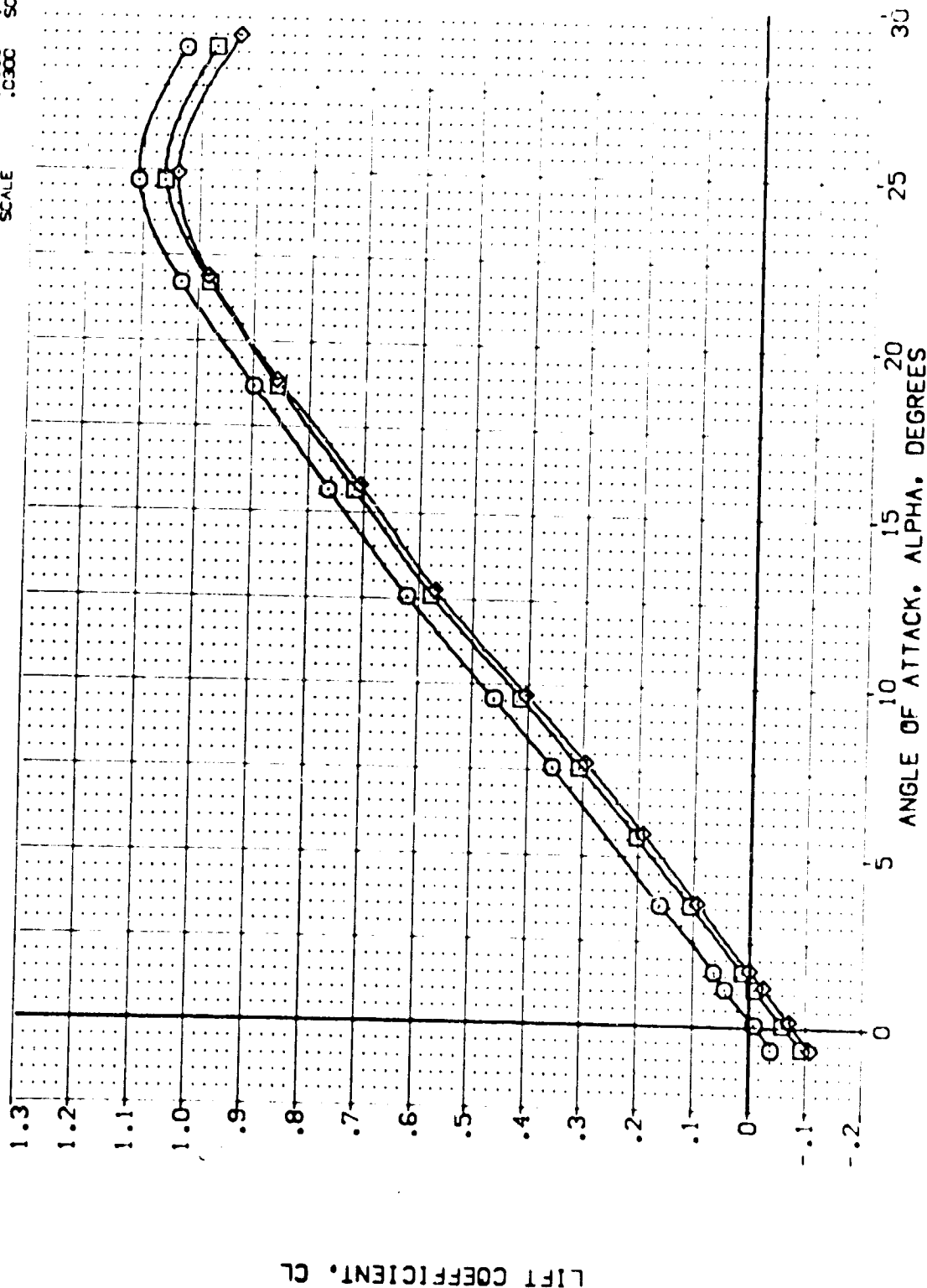


FIG. 8 BODYFLAP EFFECTS

(A)MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPDBRK	REFERENCE INFORMATION
(TEJ010)	ARC 11-747 OAS3A B C H F VI V	.000	.000	16.300	25.000	SREF 2.42:0 SC.FT.
(TEJ016)	ARC 11-747 OAS3A B C H F VI V	.000	.000	.000	25.000	LREF 14.244C
(TEJ011)	ARC 11-747 OAS3A B C H F VI V	.000	.000	-11.700	25.000	BREF 28.1004
						XMRP 32.30:0
						VMRP .0000
						ZMRP 11.2500
						SCALE .0300

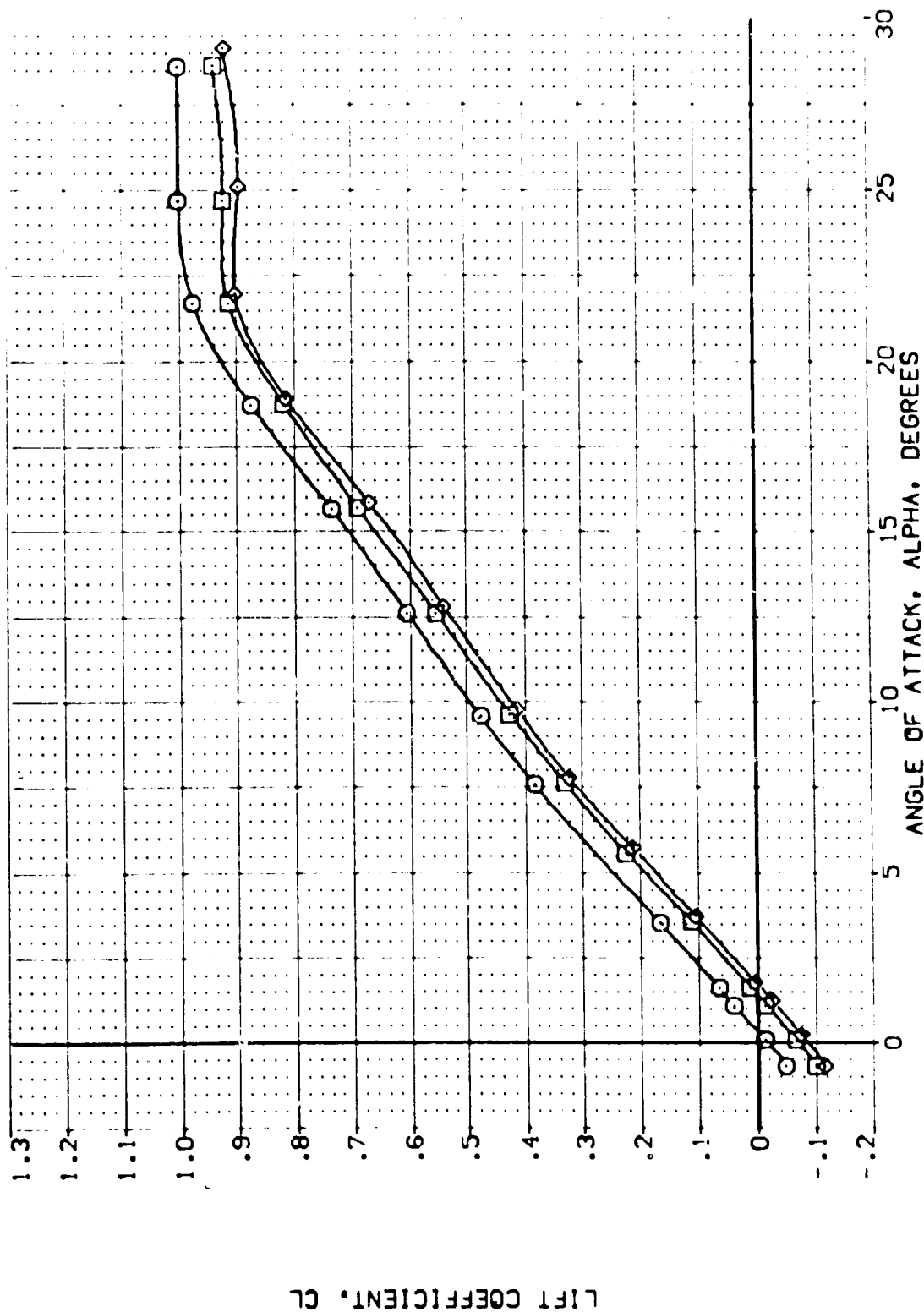


FIG. 8 BODYFLAP EFFECTS

(B)MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPOBRK	REFERENCE INFORMATION
[TEJ010]	ARC 11-747 BAS3A B C M F VI V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
[TEJ016]	ARC 11-747 BAS3A B C M F VI V	.000	.000	16.300	25.000	LREF 14.2440 IN.
[TEJ011]	ARC 11-747 BAS3A B C M F VI V	.000	.000	-11.700	25.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

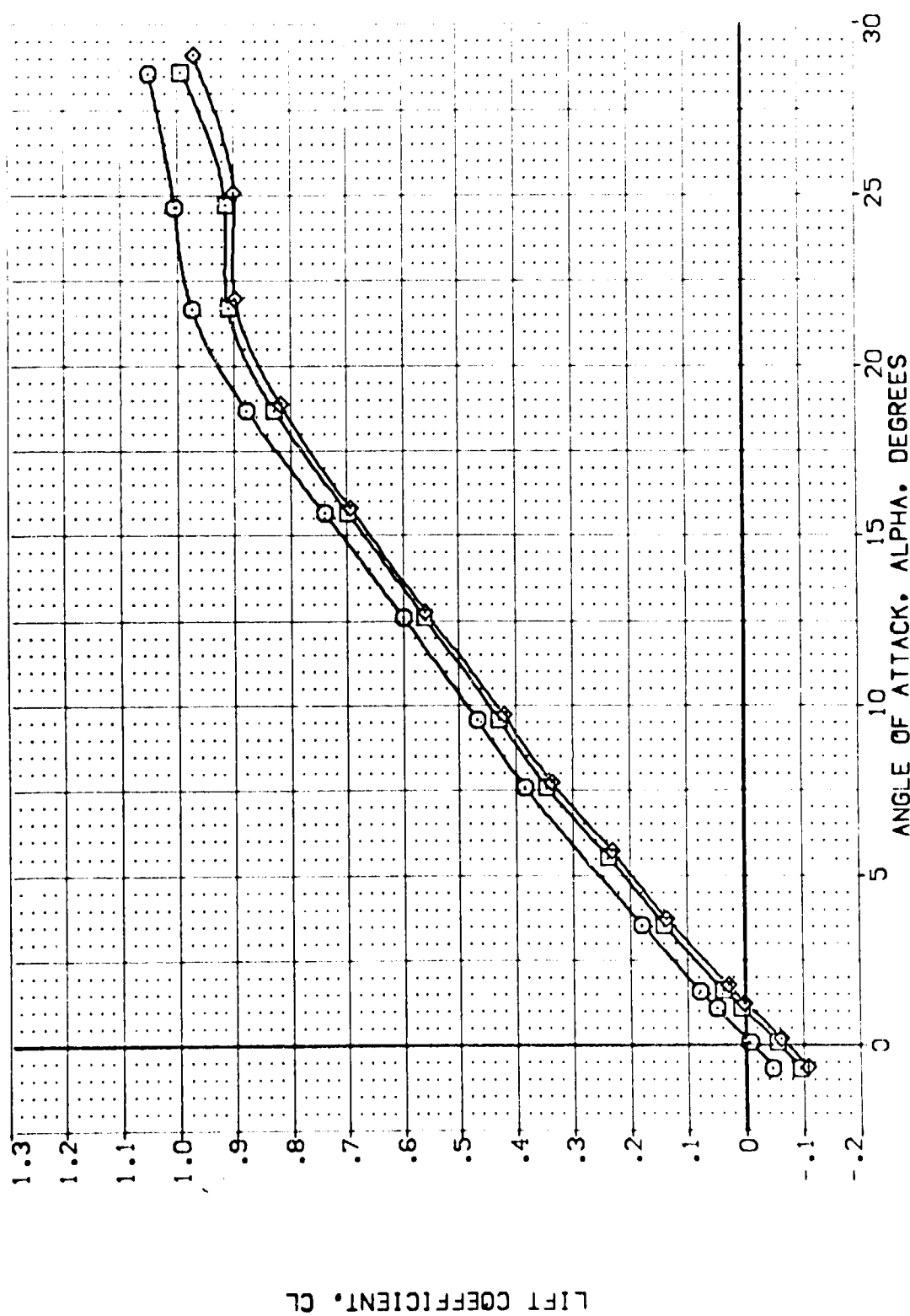


FIG. 8 BODYFLAP EFFECTS  
 (COMACH = .90)

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BODYFLAP	SPD BRK	REFERENCE INFORMATION
(TEJ010)	ARC 11-747 OAS3A B C H F VI V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(TEJ016)	ARC 11-747 OAS3A B C H F VI V	.000	.000	.000	25.000	LREF 14.2440 IN.
(TEJ011)	ARC 11-747 OAS3A B C H F VI V	.000	.000	-11.700	25.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

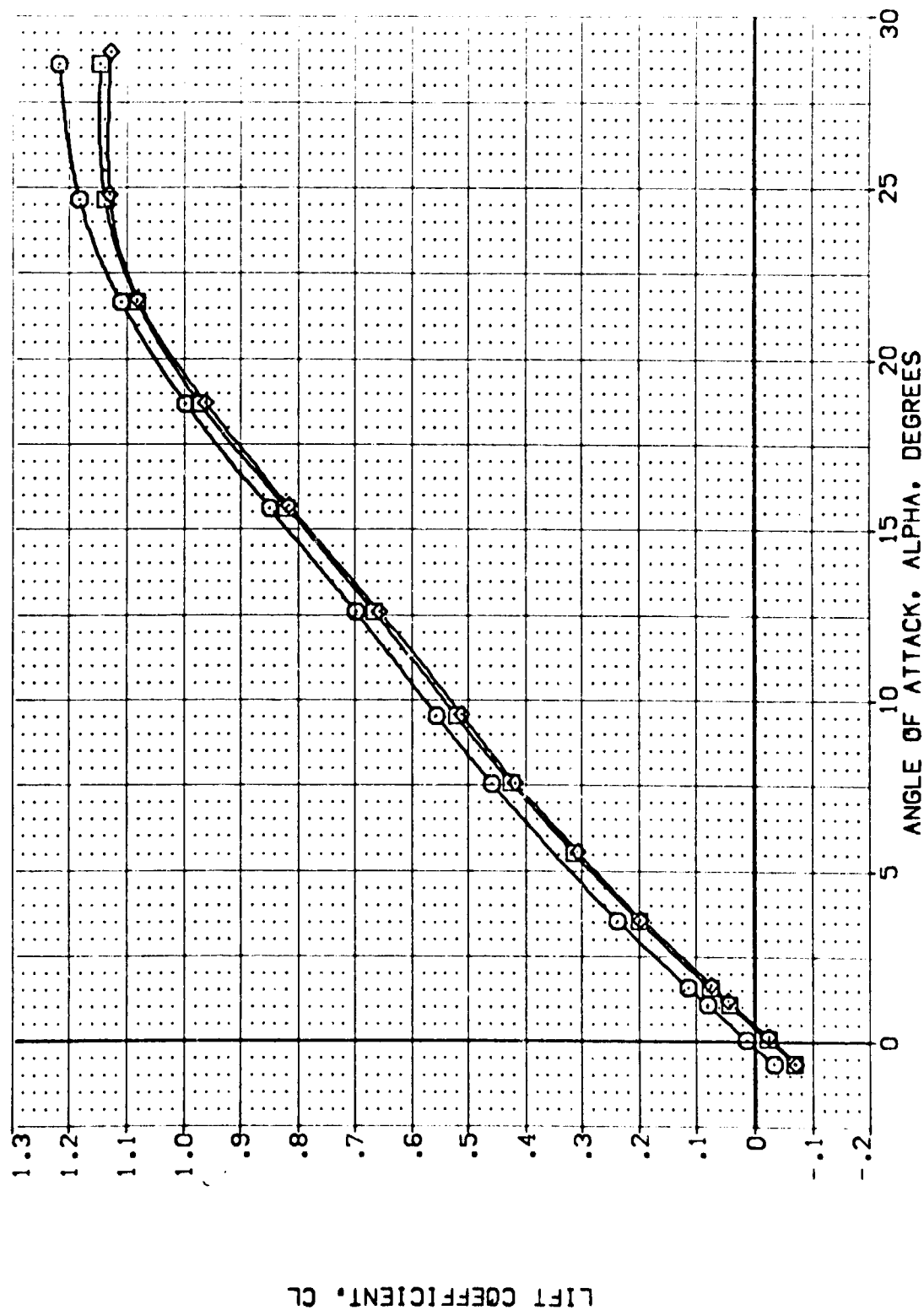


FIG. 8 BODYFLAP EFFECTS

(O)MACH = 1.05



DATA SET SYMBOL    CONFIGURATION DESCRIPTION    NON: RV/L    ELEVON    AILURON    BOFLAP    SPOBRK    REFERENCE INFORMATION

Symbol	Configuration	Non: RV/L	Elevon	Ailuron	Boflap	SpoBrk	Ref Info
(TEJ013)	ARC 11-747 BA53A B C M F VI V	NON: RV/L	.000	.000	16.300	25.000	SREF 2.4210
(TEJ016)	ARC 11-747 BA53A B C M F VI V	NON: RV/L	.000	.000	.000	25.000	LREF 14.2440
(TEJ011)	ARC 11-747 BA53A B C M F VI V	NON: RV/L	.000	.000	-11.700	25.000	BREF 28.1004
							XMRP 32.3010
							YMRP 11.2500
							ZMRP 11.2500
							SCALE .0300

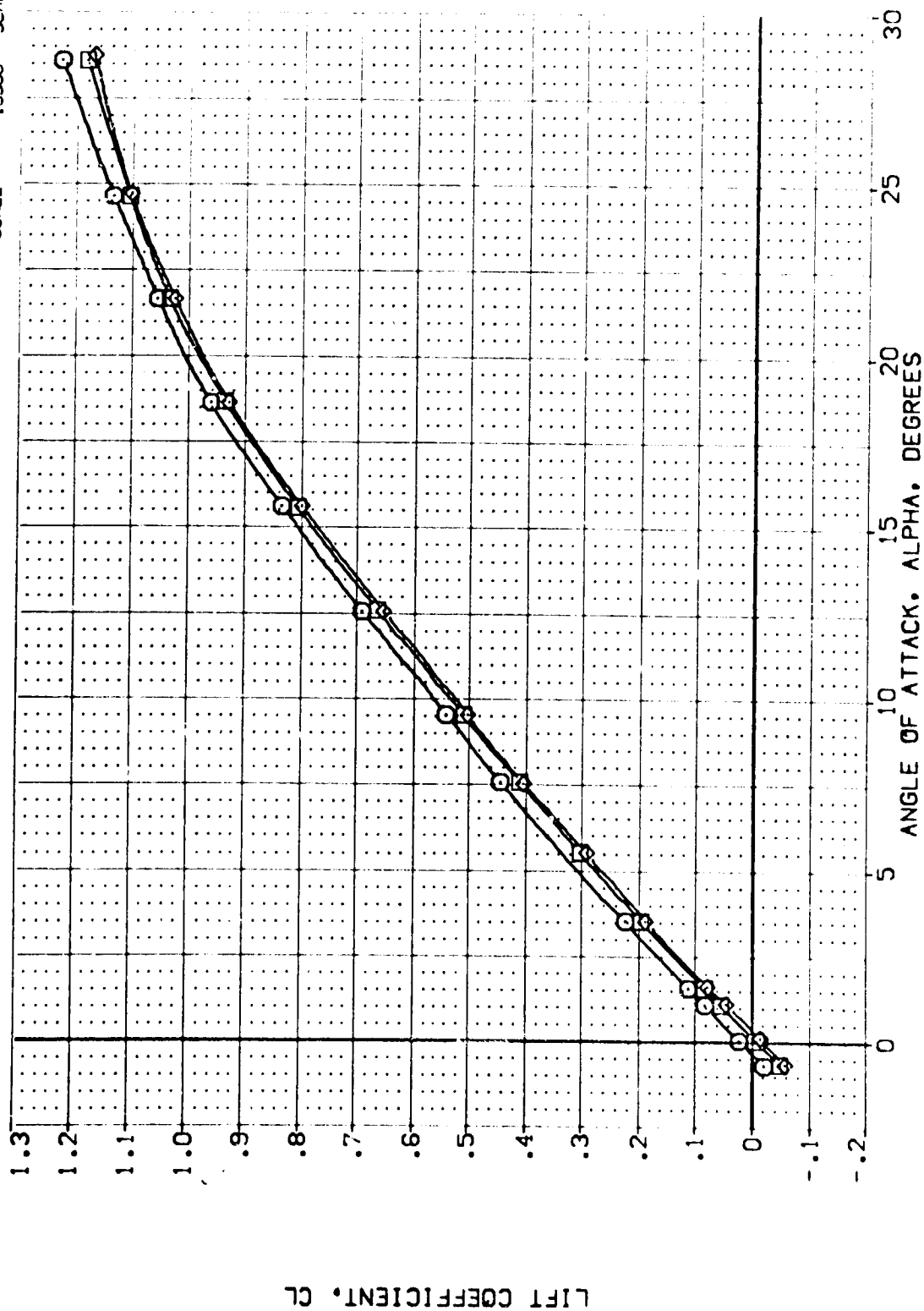


FIG. 8 BODYFLAP EFFECTS

(E)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPOBRK	REFERENCE INFORMATION
(TEJO10)	ARC 11-747 DA53A B C M F VI V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(TEJO16)	ARC 11-747 DA53A B C M F VI V	.000	.000	.000	25.000	LREF 14.2440 IN.
(TEJO11)	ARC 11-747 DA53A B C M F VI V	.000	.000	-11.700	25.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

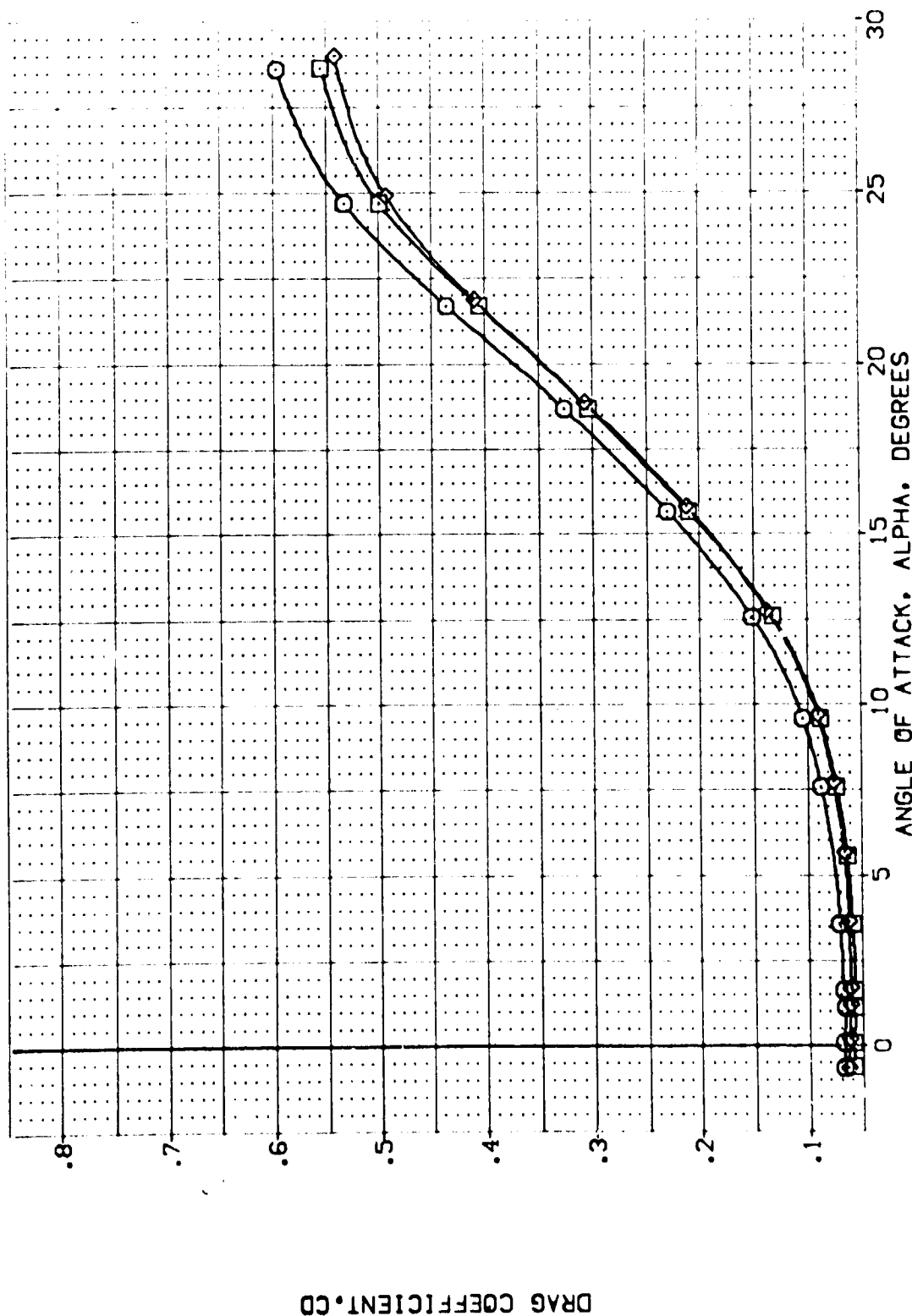


FIG. 8 BODYFLAP EFFECTS

(A)MACH = .60



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPOBRK	REFERENCE INFORMATION
(TEJ010)	ARC 11-747 GAS3A B C M F VI V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(TEJ016)	ARC 11-747 GAS3A B C M F VI V	.000	.000	.000	25.000	LREF 14.2440 IN.
(TEJ011)	ARC 11-747 GAS3A B C M F VI V	.000	.000	-11.700	25.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0000

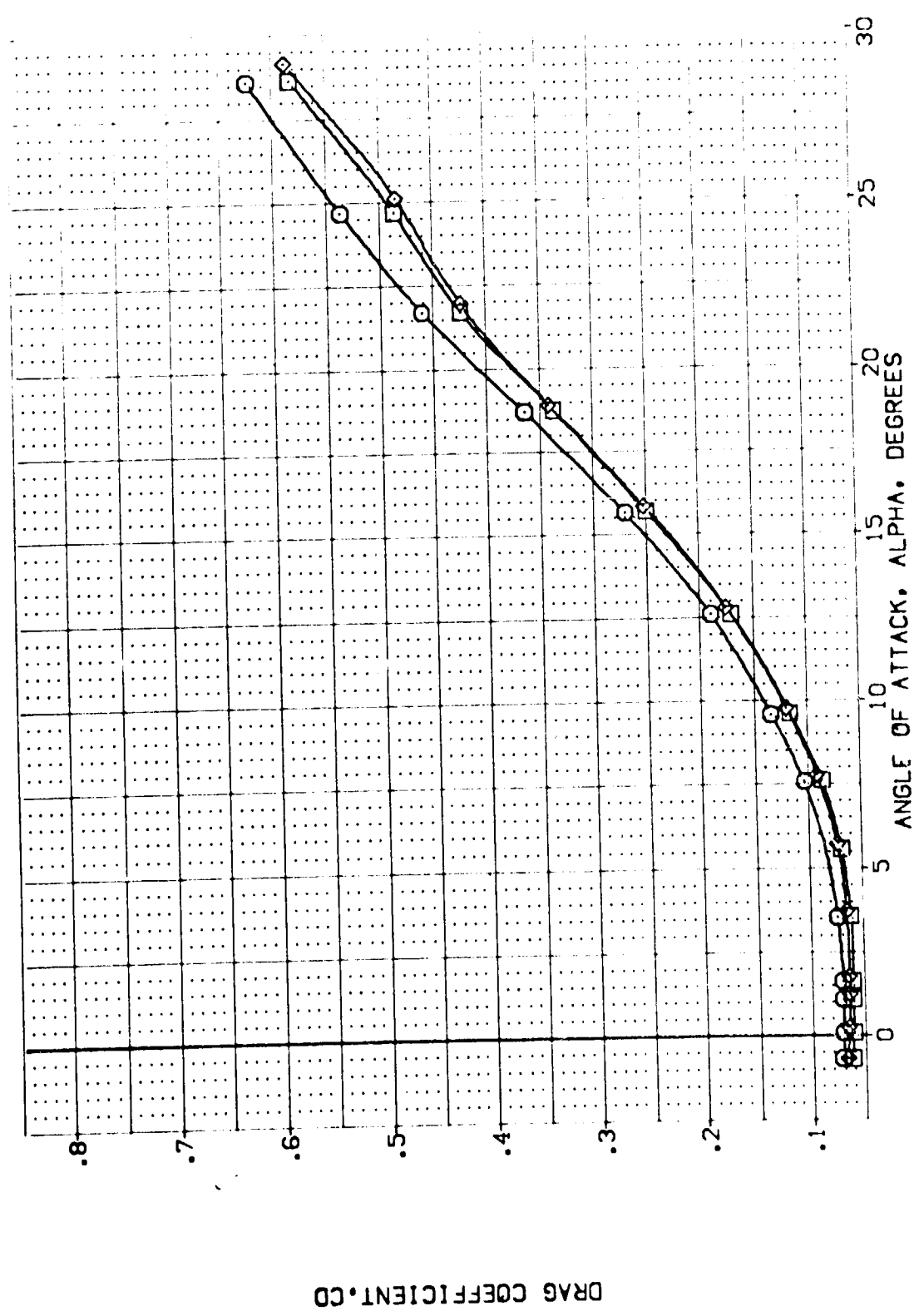


FIG. 8 BODYFLAP EFFECTS

(B)MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BODYFLAP	SPEED	REFERENCE INFORMATION
(TE4010)	ARC 11-747 0A53A B C M F V1 V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(TE4015)	ARC 11-747 0A53A B C M F V1 V	.000	.000	.000	25.000	LREF 14.2440 IN.
(TE4011)	ARC 11-747 0A53A B C M F V1 V	.000	.000	-11.700	25.000	BREF 28.1004 IN.
						YMRP 32.3010 IN.
						ZMRP .0000 IN.
						SCALE 11.2500 IN.

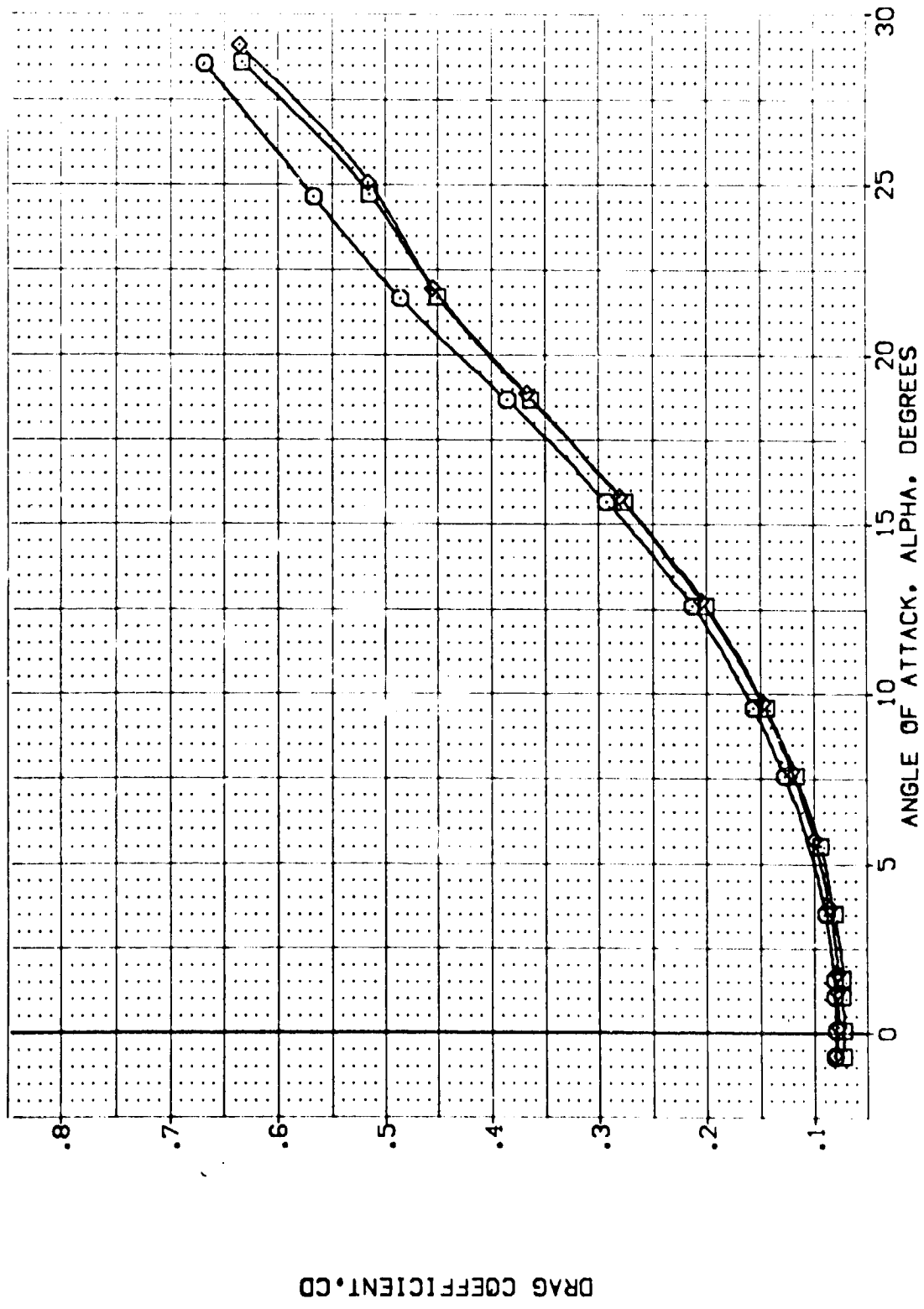


FIG. 8 BODYFLAP EFFECTS

(C)MACH = .90

DATA SET SYMBOL: (TEJ010) (TEJ016) (TEJ011)

CONFIGURATION DESCRIPTION: ARC 11-747 DA53A B C H F VI V NCH: RV/L NCH: RV/L NCH: RV/L

ELEVON: .000 .000 .000

AILERON: .000 .000 .000

BOFLAP: 16.300 .000 -11.700

SPOBRK: 25.000 25.000 25.000

REFERENCE INFORMATION: SREF 2.4210 SQ.FT. LREF 14.2440 IN. BRREF 28.0004 IN. XMRP 32.3010 IN. YMRP .0000 IN. ZMRP 11.2500 IN. SCALE .0300

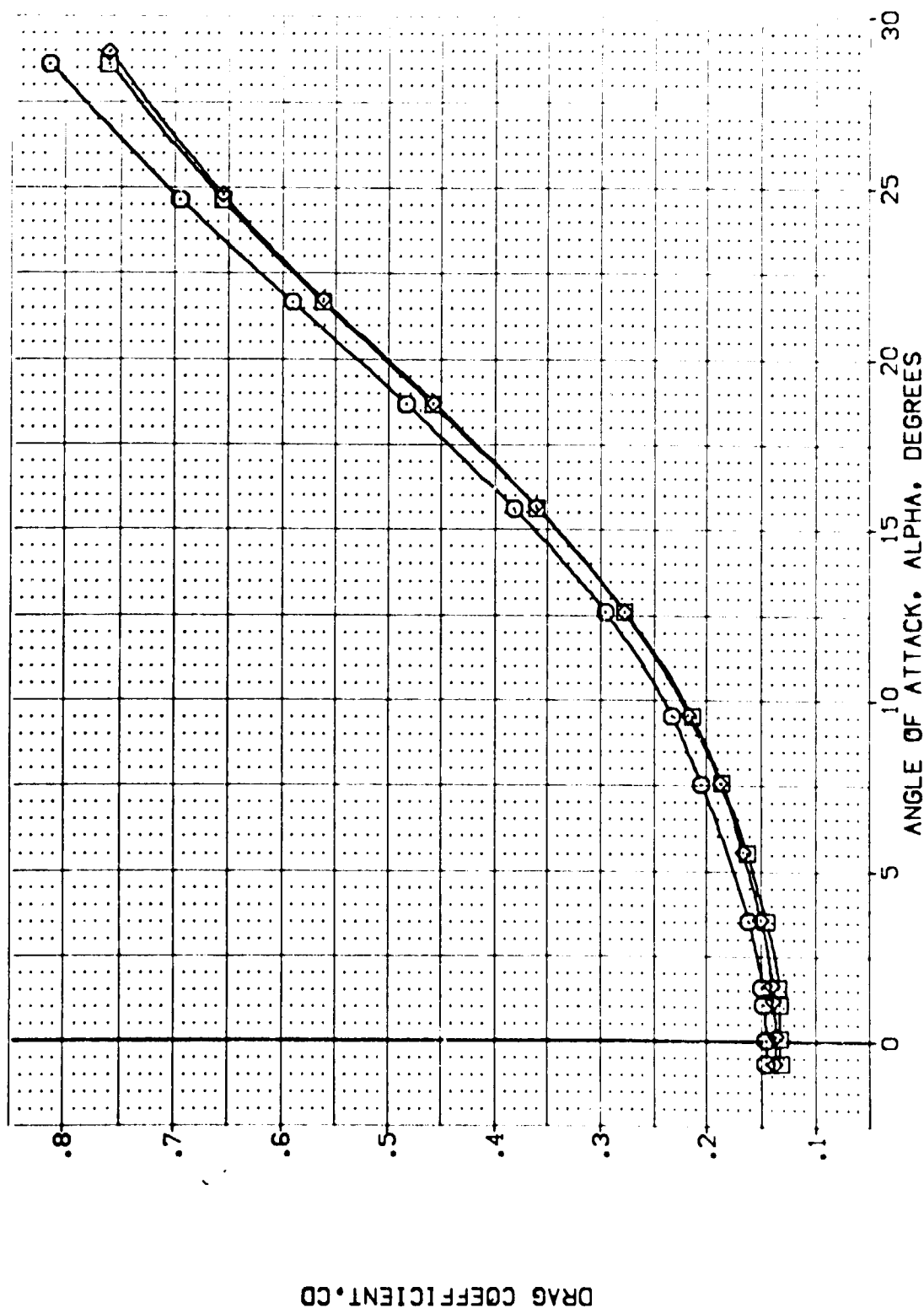


FIG. 8 BODYFLAP EFFECTS

(CD)MACH = 1.05

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(TEJ010) ARC 11-747 BASSA B C H F VI V

(TEJ016) ARC 11-747 BASSA B C H F VI V

(TEJ011) ARC 11-747 BASSA B C H F VI V

NON: RV/L

NON: RV/L

NON: RV/L

ELEVON .000

AILERON .000

BD FLAP 16.300

SPDRK 25.000

REFERENCE INFORMATION

SREF 2.4210 SQ. FT.

LREF 14.2440 IN.

BPREF 28.0004 IN.

XPRP 32.3010 IN.

YPRP .0000 IN.

ZPRP 11.2500 IN.

SCALE .0300

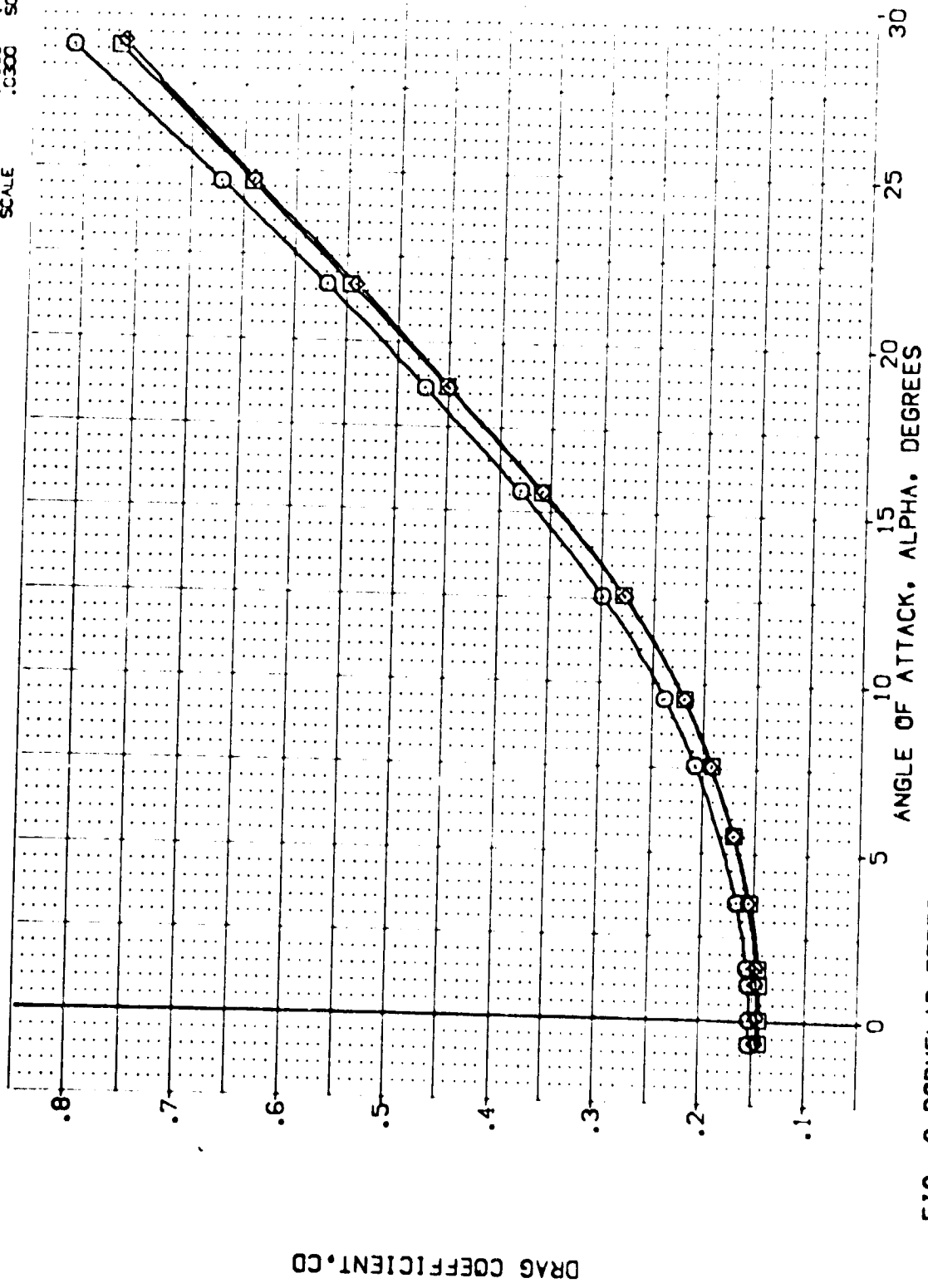


FIG. 8 BODYFLAP EFFECTS

(E)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPDRBK	REFERENCE INFORMATION
(TEJ010)	ARC 11-747 B A S 3 A B C M F V I V	.000	.000	16.300	25.000	SREF 2.4210 50. FT.
(TEJ016)	ARC 11-747 B A S 3 A B C M F V I V	.000	.000	.000	25.000	LREF 14.2440
(TEJ011)	ARC 11-747 B A S 3 A B C M F V I V	.000	.000	-11.700	25.000	BREF 28.1004
						XMRP 32.3010
						YMRP .0000
						ZMRP 11.2500
						SCALE 11.0300

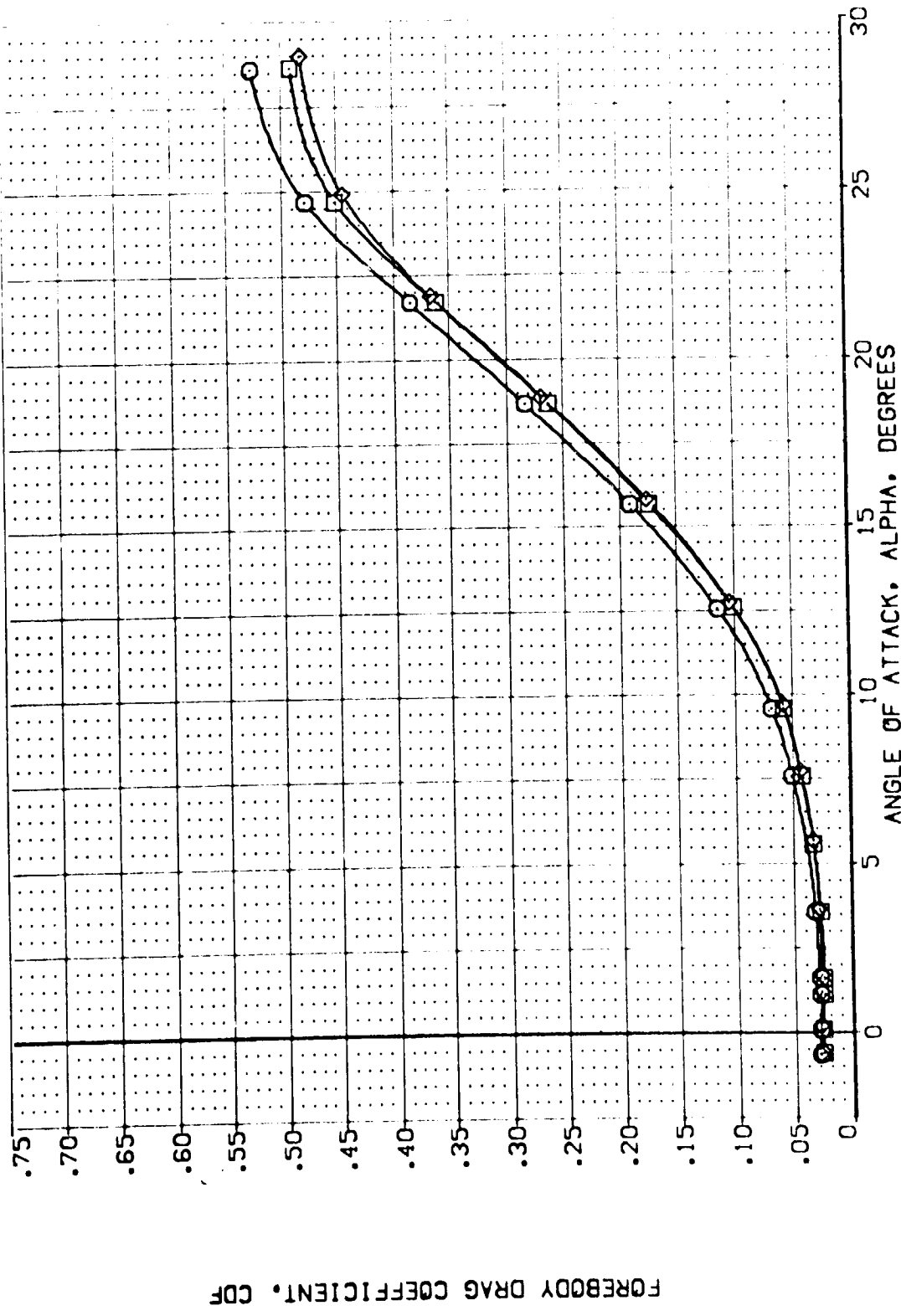


FIG. 8 BODYFLAP EFFECTS

(A)MACH = .60



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPDBRK	REFERENCE INFORMATION
(TEJ010)	ARC 11-747 QAS3A B C H F VI	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(TEJ016)	ARC 11-747 QAS3A B C H F VI	.000	.000	16.300	25.000	LREF 14.2440 IN.
(YEJ011)	ARC 11-747 QAS3A B C H F VI	.000	.000	-11.700	25.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

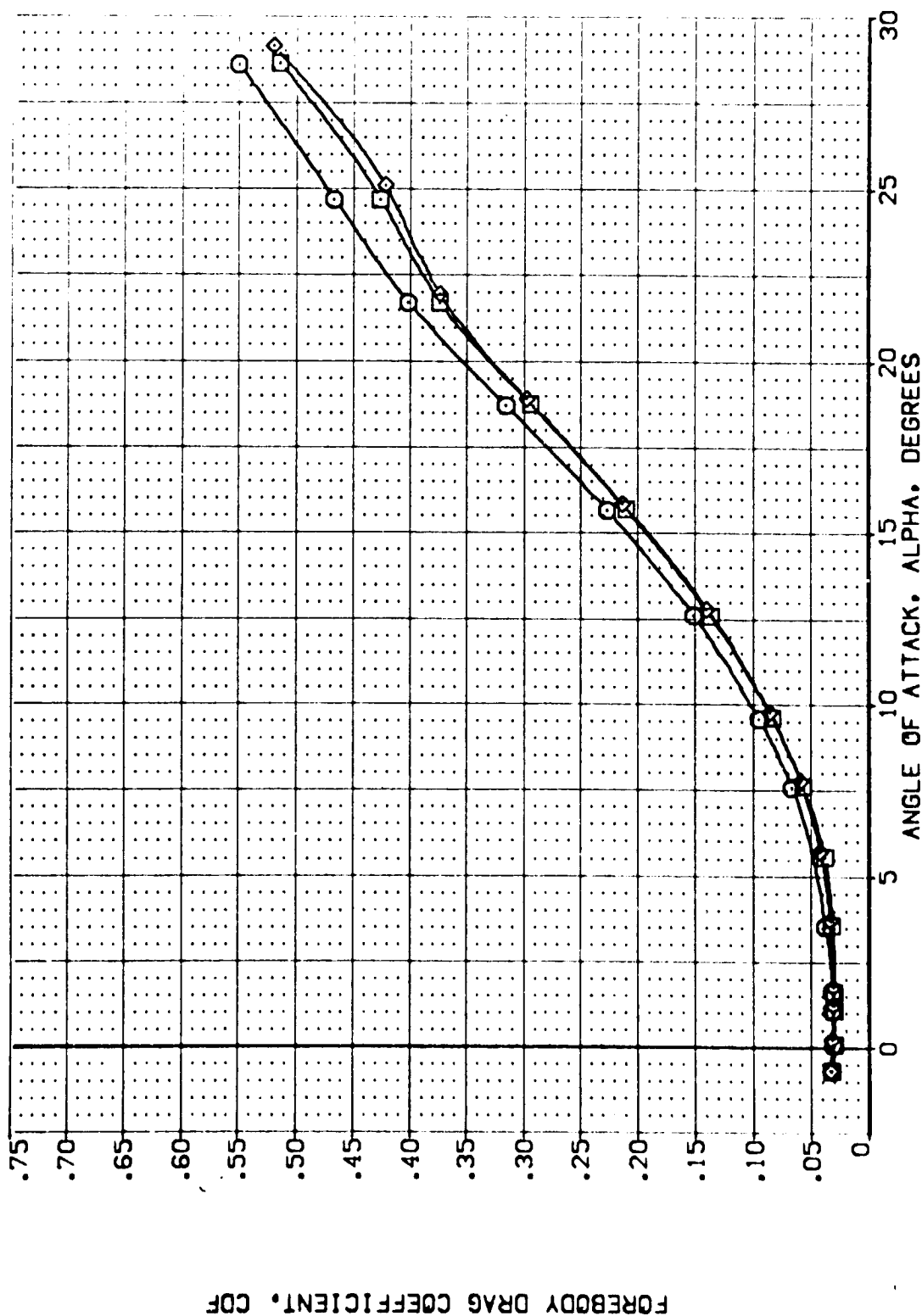


FIG. 8 BODYFLAP EFFECTS

(B)MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	BOFLAP	SPDRK	REFERENCE INFORMATION
(TEJ010)	ARC 11-747 BA53A B C M F VI V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(TEJ016)	ARC 11-747 BA53A B C M F VI V	.000	.000	.000	25.000	LREF 14.2440 IN.
(TEJ011)	ARC 11-747 BA53A B C M F VI V	.000	.000	-11.700	25.000	BREF 28.1004 IN.
						XMPP 32.3010 IN.
						YMPP .0000 IN.
						ZMPP 11.2500 IN.
						SCALE .0300

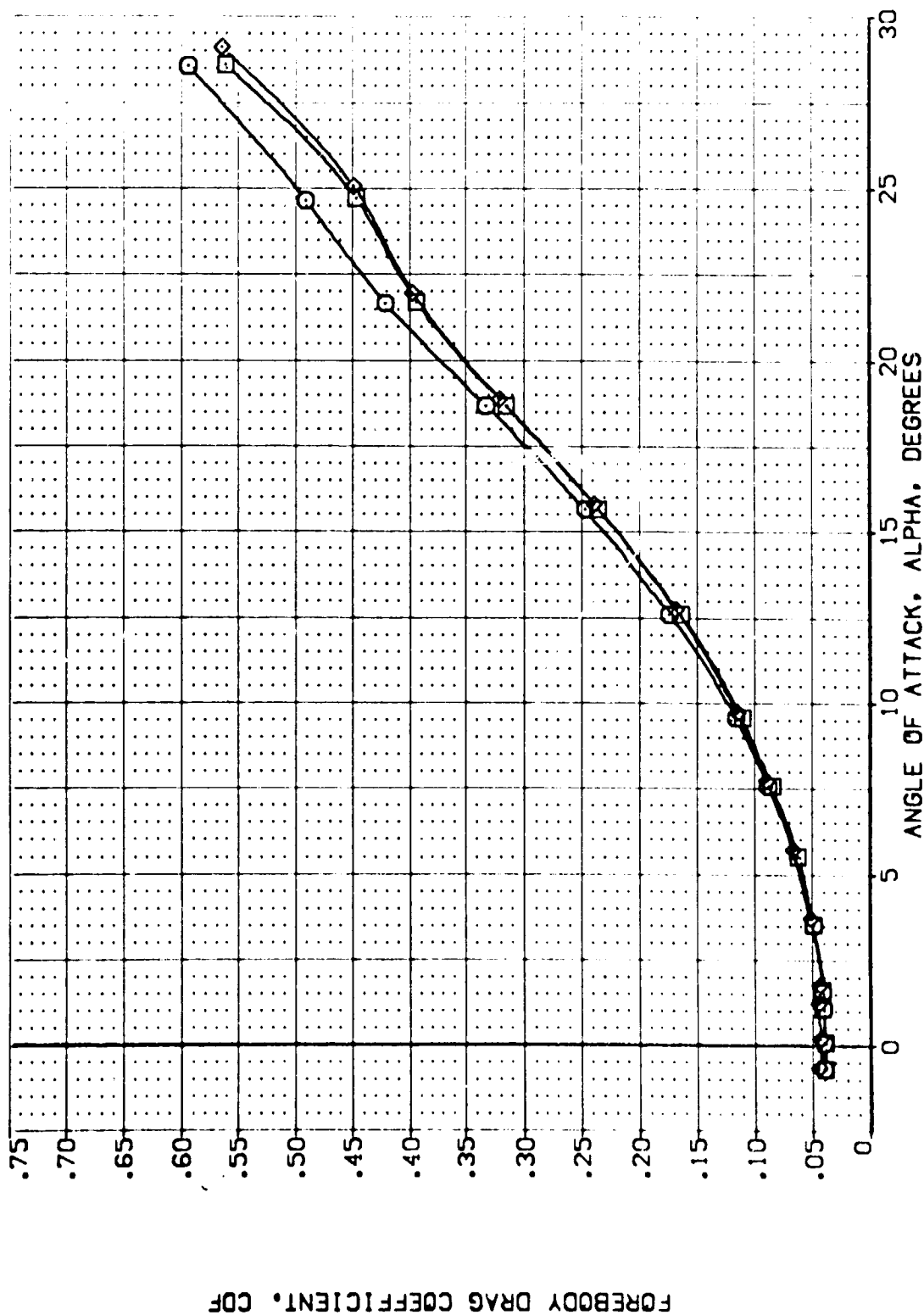


FIG. 8 BODYFLAP EFFECTS

(C)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPOBRK	REFERENCE INFORMATION
(TEJ010)	ARC 11-747 BAS3A B C M F VI V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(TEJ016)	ARC 11-747 BAS3A B C M F VI V	.000	.000	16.300	25.000	LREF 14.2440 IN.
(TEJ011)	ARC 11-747 BAS3A B C M F VI V	.000	.000	-11.700	25.000	BREF 28.1004 IN.
						YREF 32.3010 IN.
						ZREF 11.2500 IN.
						SCALE .0300

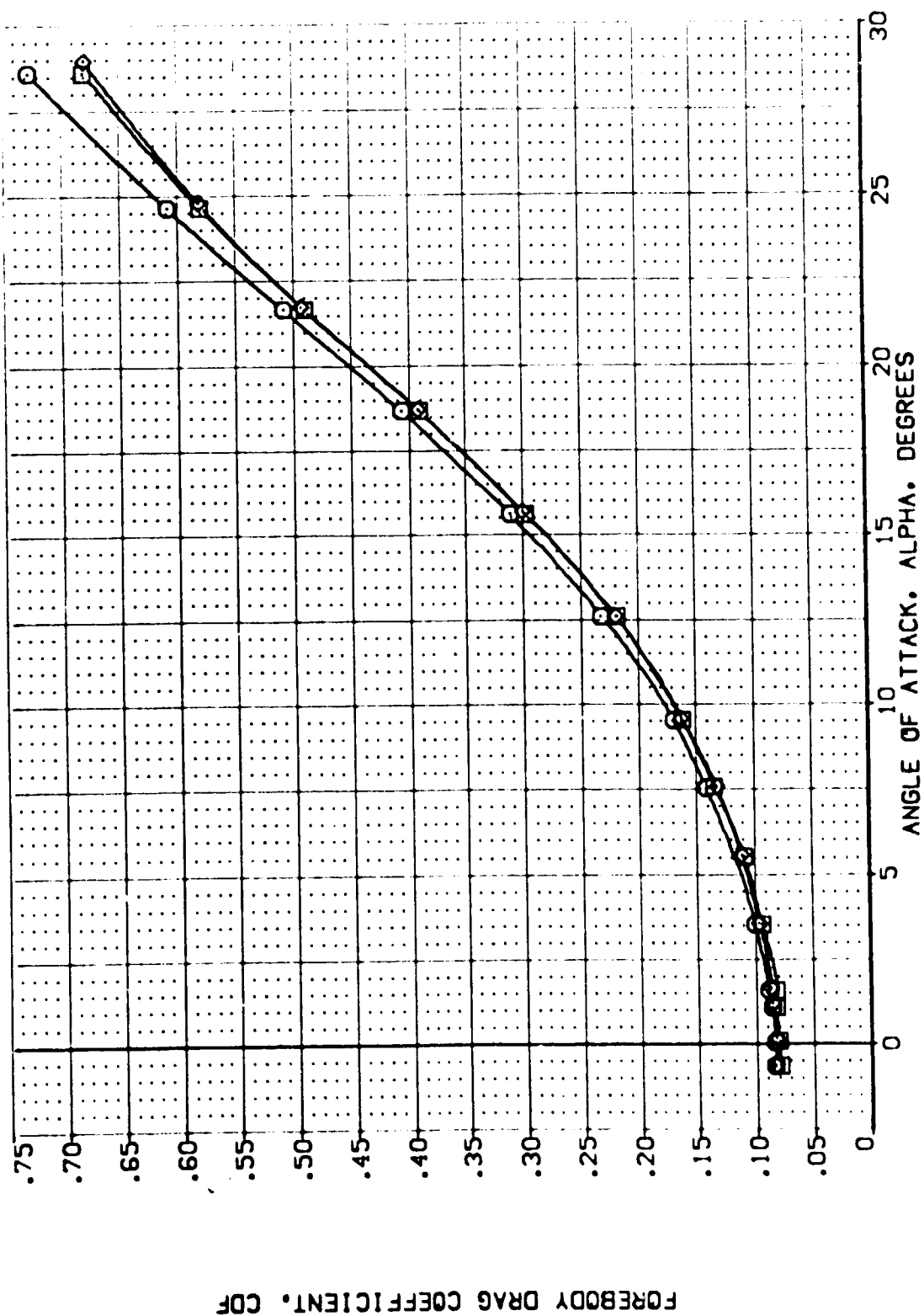


FIG. 8 BODYFLAP EFFECTS

(O)MACH = 1.05



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVATION	ALUDON	BDFLAP	SPOBRK	REFERENCE INFORMATION
[TEJ010]	ARC 11-747 DA53A B C M F VI V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
[TEJ016]	ARC 11-747 DA53A B C M F VI V	.000	.000	.000	25.000	LREF 14.2440 IN.
[TEJ011]	ARC 11-747 DA53A B C M F VI V	.000	.000	-11.700	25.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300 SCALE

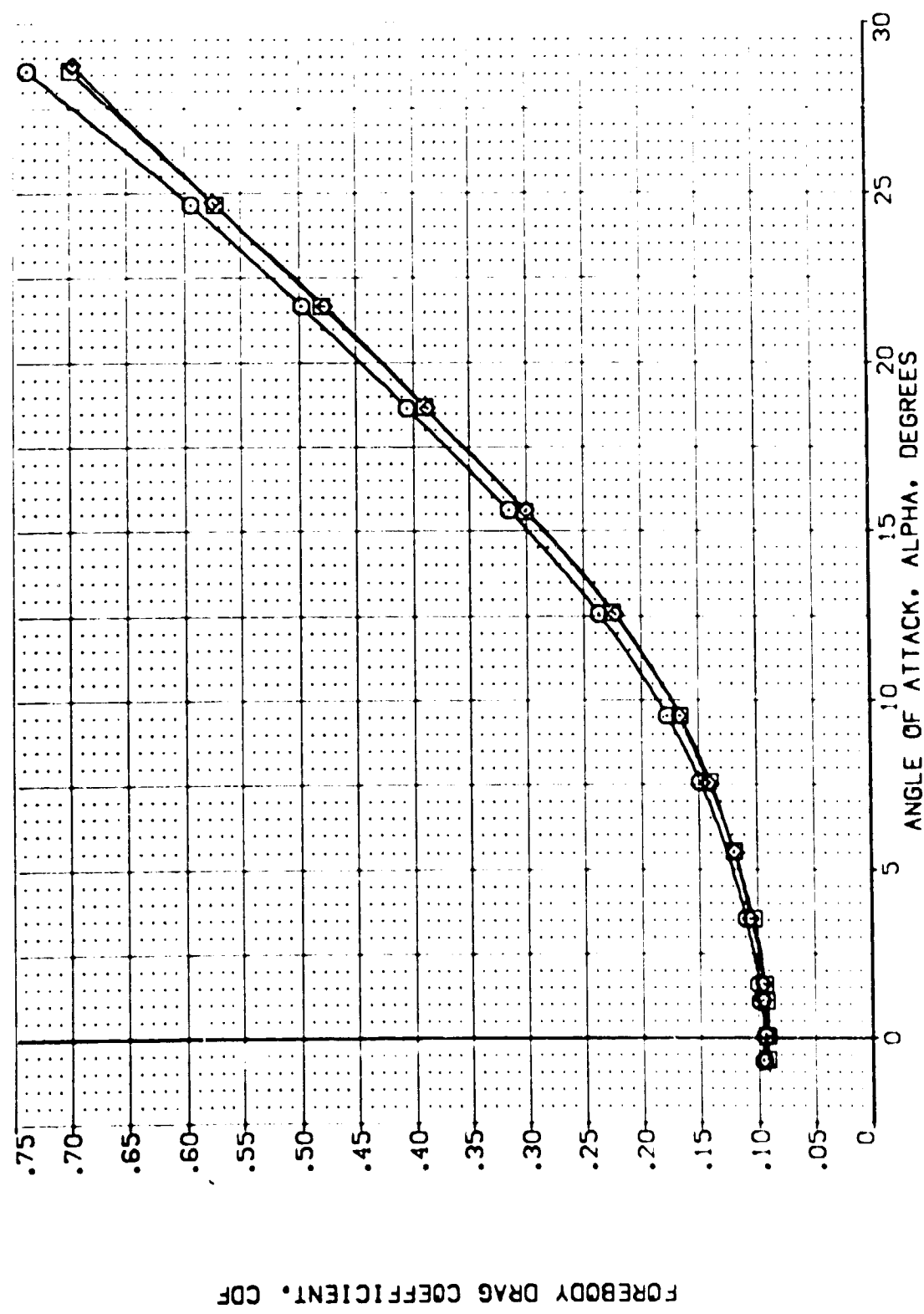


FIG. 8 BODYFLAP EFFECTS

(E)MACH = 1.20

DATA SET SYMBOL CONFIGURATION DESCRIPTION REFERENCE INFORMATION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BODY FLAP	SPD BRK	REFERENCE INFORMATION
(TEJ010)	ARC 11-747 DAS3A B C M F V1	.000	.000	16.300	25.000	SREF 2.4210 SQ. FT.
(TEJ016)	ARC 11-747 DAS3A B C M F V1	.000	.000	.000	25.000	LREF 14.2440
(TEJ011)	ARC 11-747 DAS3A B C M F V1	.000	.000	-11.700	25.000	BREF 28.1004
						XMRP 32.3010
						YMRP .0000
						ZMRP .0000
						SCALE 11.2500
						.0300

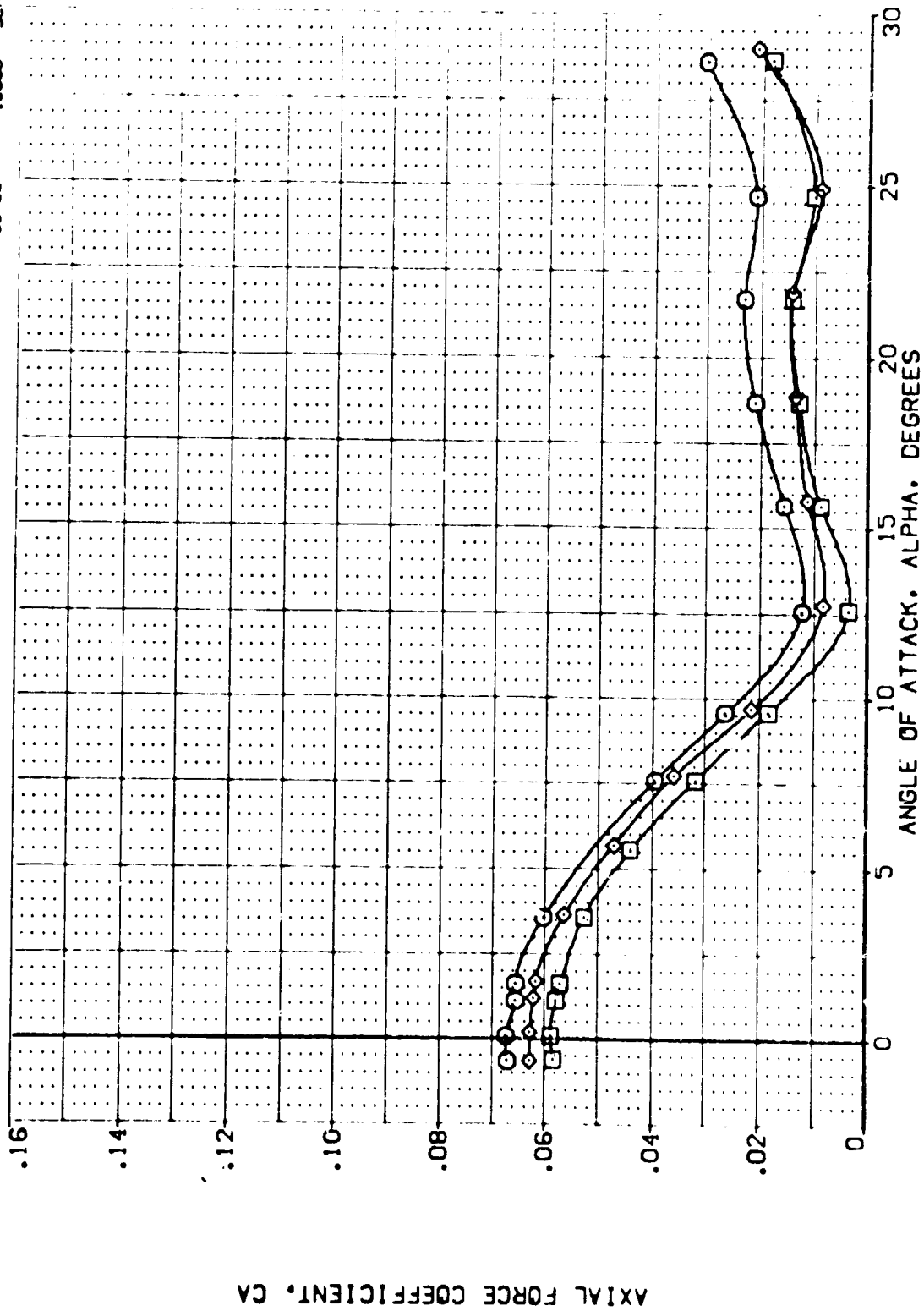


FIG. 8 BODYFLAP EFFECTS

(A)MACH = .60



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BDF LAP	SPD BRK	REFERENCE INFORMATION
(TEJ010)	ARC 11-747 OAS3A B C M F V1 V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(TEJ016)	ARC 11-747 OAS3A B C M F V1 V	.000	.000	.000	25.000	LREF 14.2440 IN.
(TEJ011)	ARC 11-747 OAS3A B C M F V1 V	.000	.000	-11.700	25.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

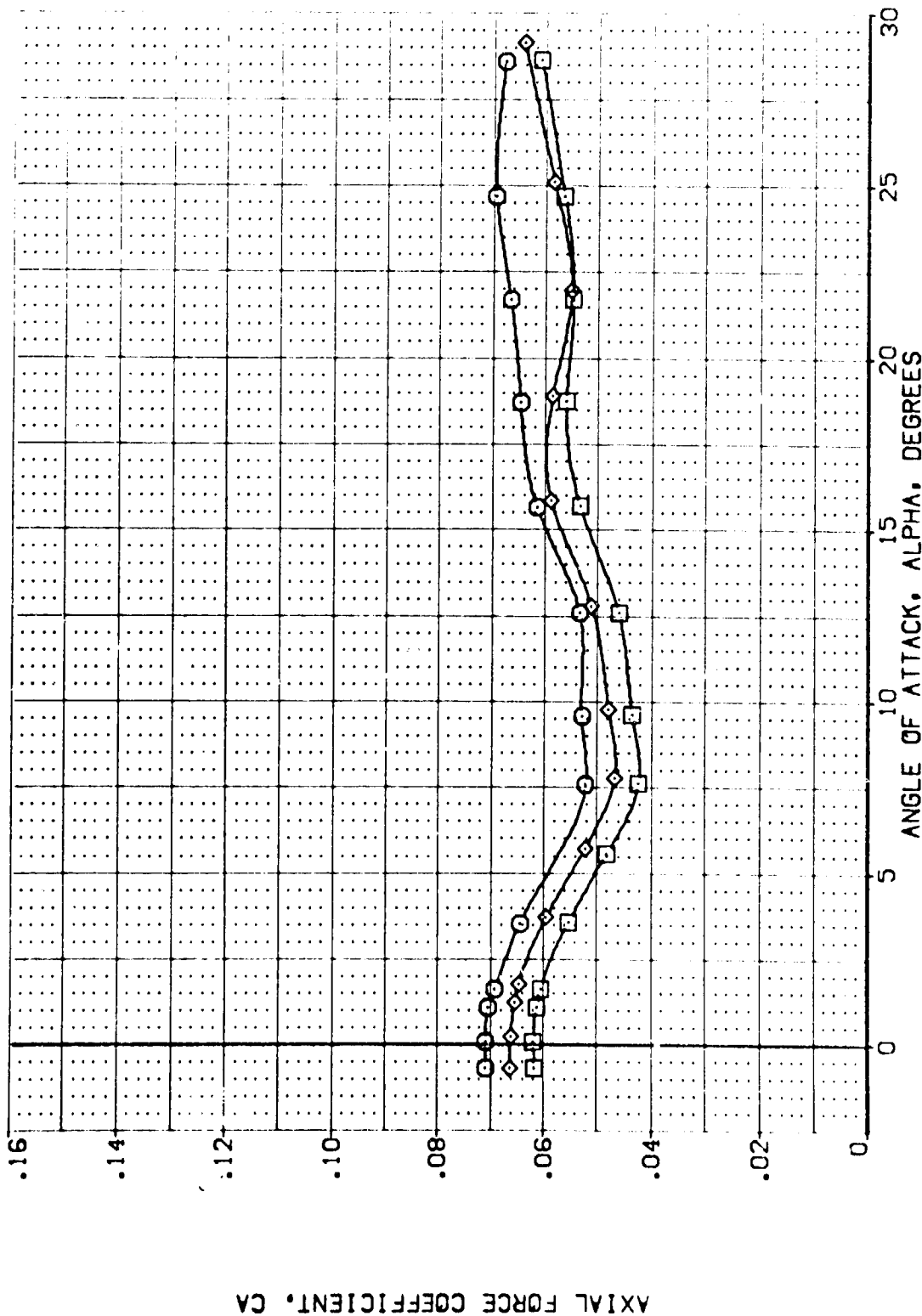


FIG. 8 BODYFLAP EFFECTS

(B)MACH = .80



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	ROFLAP	SPDRBK	REFERENCE INFORMATION
[TEJ010]	ARC 11-747 OAS3A B C M F VI V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
[TEJ016]	ARC 11-747 OAS3A B C M F VI V	.000	.000	.000	25.000	LREF 14.2440 IN.
[TEJ011]	ARC 11-747 OAS3A B C M F VI V	.000	.000	-11.700	25.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE C300 SCALE

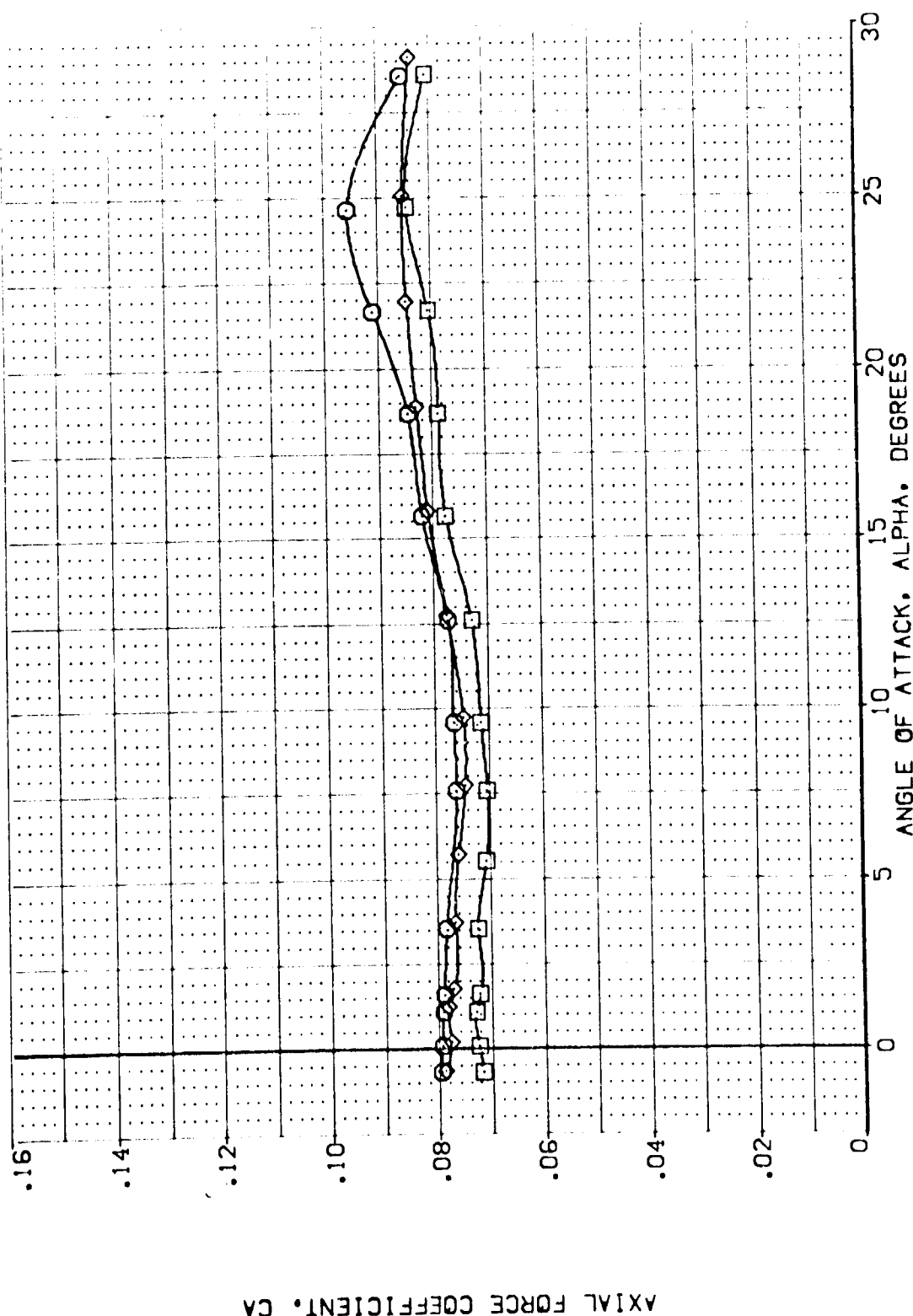
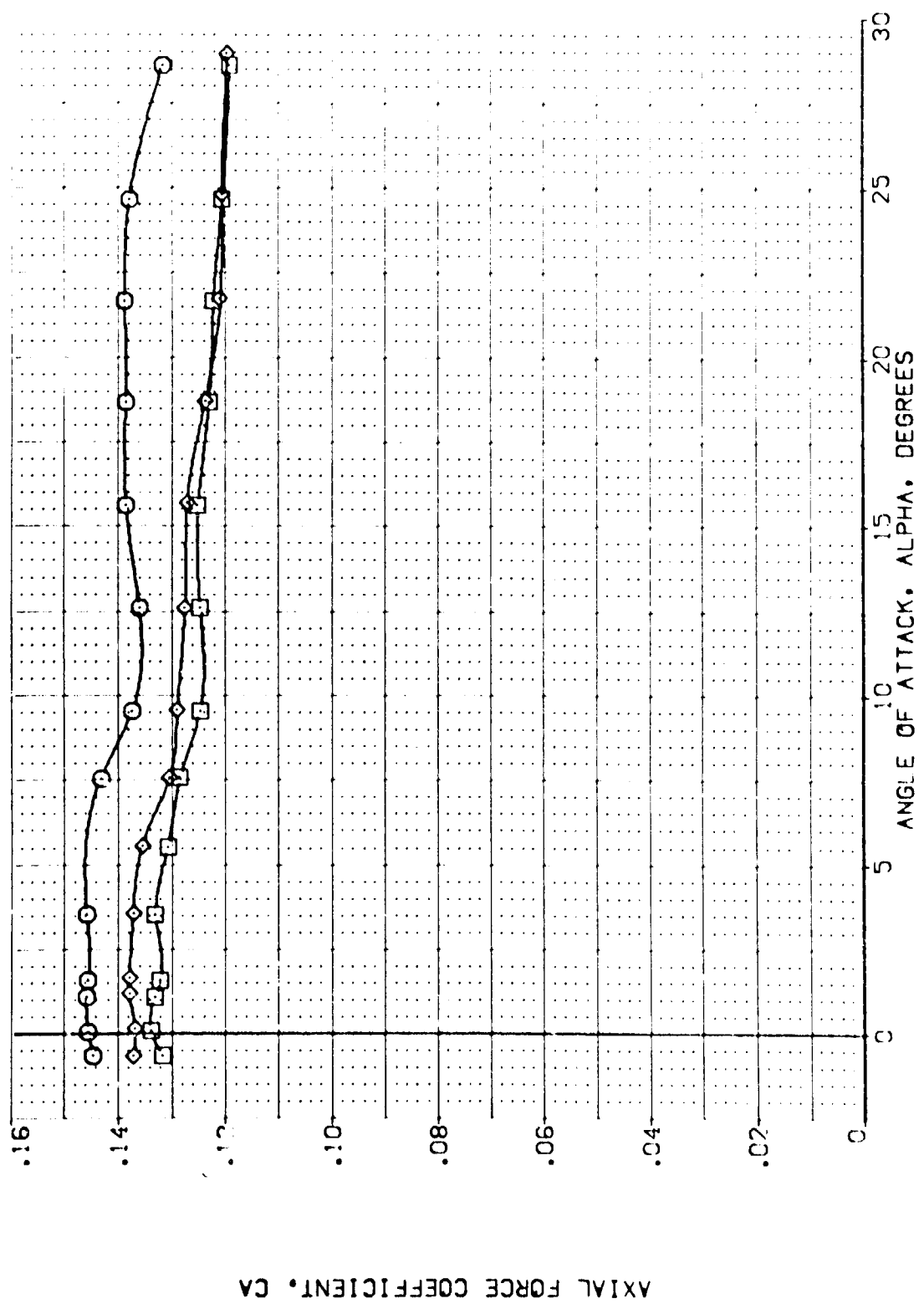


FIG. 8 BODYFLAP EFFECTS

(CJ)MACH = .90



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AIRLON	BOFLAP	SP00BK	REFERENCE INFORMATION
[TEJ010]	ARC 11-747 C-53A B C H F VI V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
[TEJ016]	ARC 11-747 C-53A B C H F VI V	.000	.000	.000	25.000	LREF 14.244C
[TEJ011]	ARC 11-747 C-53A B C H F VI V	.000	.000	-11.700	25.000	BREF 28.100A
						XPRP .000C
						YPRP .000C
						ZPRP 11.250C
						SCALE .030C



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FIG. 8 BODYFLAP EFFECTS

COMAC = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPODBK	REFERENCE INFORMATION
(TEJO10)	ARC 11-747 DA53A B C M F V1 V	.000	.000	16.300	25.000	SREF 2.421 SQ.FT.
(TEJO16)	ARC 11-747 DA53A B C M F V1 V	.000	.000	.000	25.000	LREF 14.2440
(TEJO11)	ARC 11-747 DA53A B C M F V1 V	.000	.000	-11.700	25.000	BREF 28.1004
						YMRP 32.3010
						ZMRP .0000
						SCALE 11.2500
						SCALE .0300

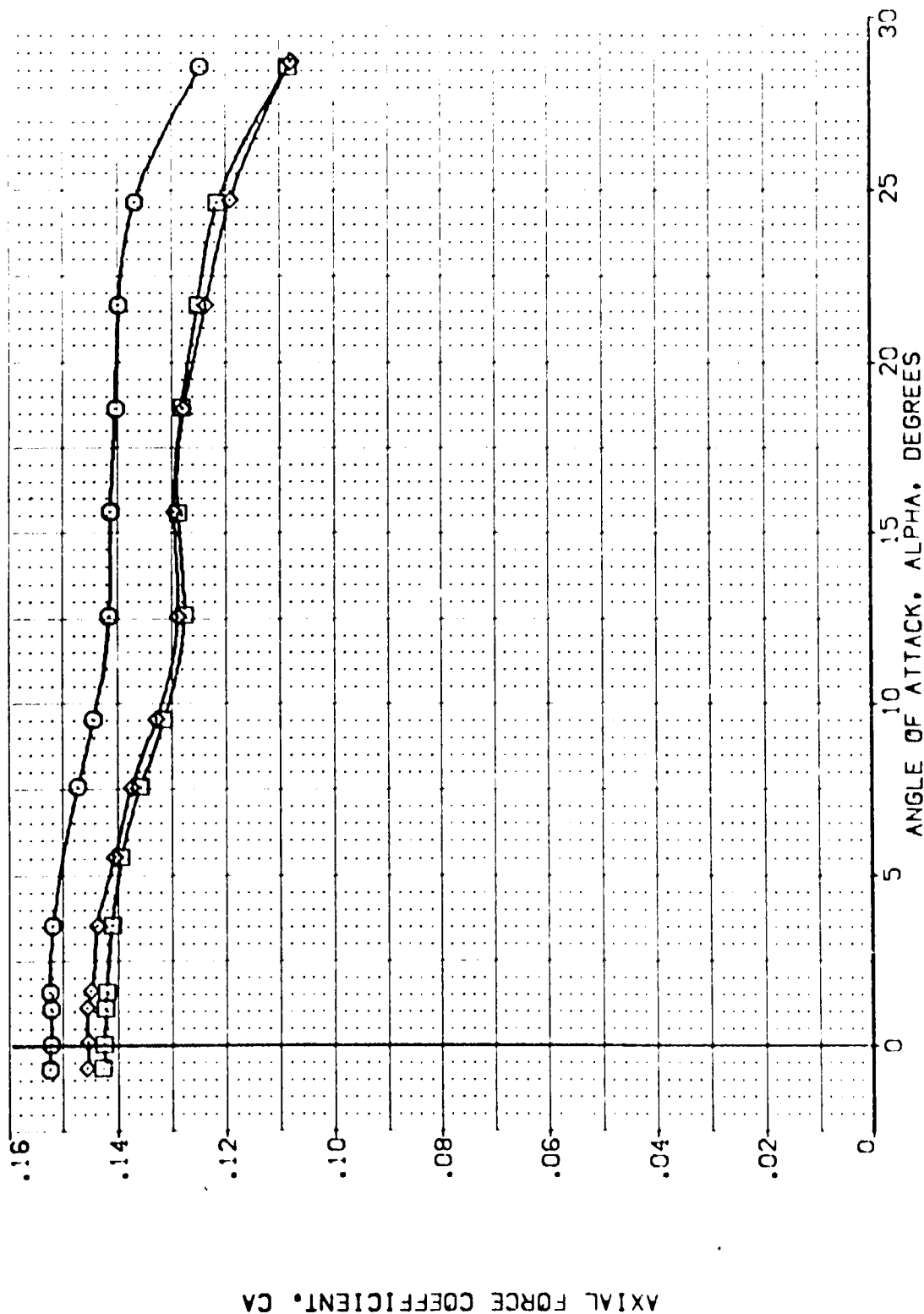


FIG. 8 BODYFLAP EFFECTS

(E)MACH = 1.20

DATA SET SYMBOL: (TEJ010) (TEJ016) (TEJ011)

CONFIGURATION DESCRIPTION: ARC 11-747 BAS3A B C M F VI V NOM: RV/L ARC 11-747 BAS3A B C M F VI V NOM: RV/L ARC 11-747 BAS3A B C M F VI V NOM: RV/L

ELEVON: .000 .000 .000

AILERON: .000 .000 .000

BDFLAP: 16.300 .000 -11.700

SPOBRK: 25.000 25.000 25.000

REFERENCE INFORMATION: SREF 2.4210 SQ.FT. LREF 14.2440 IN. BREF 28.1004 IN. XMRP 32.3010 IN. YMRP .0000 IN. ZMRP 11.2500 IN. SCALE .0300

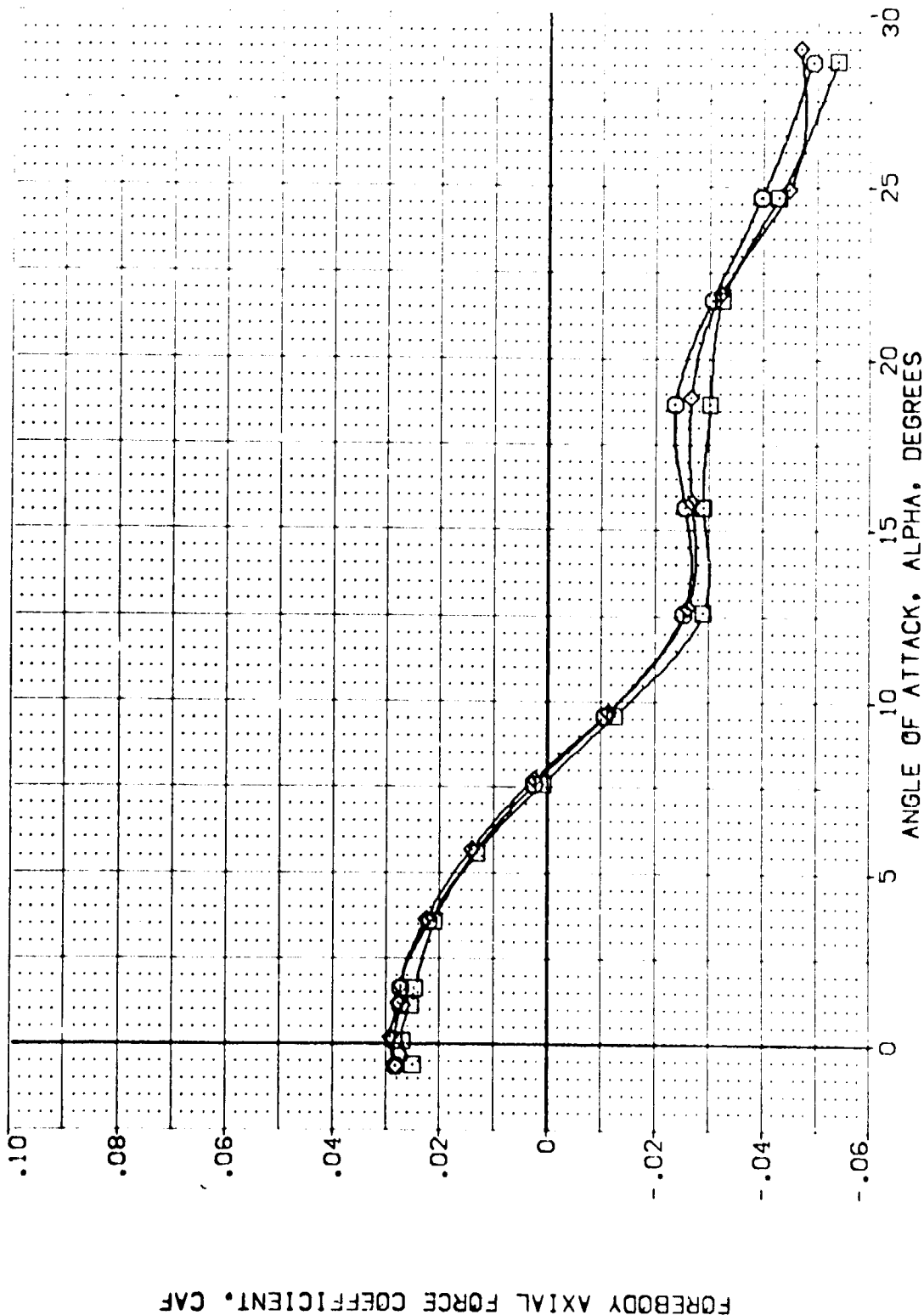


FIG. 8 BODYFLAP EFFECTS

(A)MACH = .60



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPDBRK	REFERENCE INFORMATION
(1EJ010)	ARC 11-747 GA53A B C M F V1 V	.000	.000	16.300	25.000	SREF 2.421C SQ.FT.
(1EJ016)	ARC 11-747 GA53A B C M F V1 V	.000	.000	.000	25.000	LREF 14.244C IN.
(1EJ011)	ARC 11-747 GA53A B C M F V1 V	.000	.000	-11.700	25.000	BREF 28.100C IN.
						XMRP 32.301C IN.
						YMRP .000C IN.
						ZMRP 11.250C IN.
						SCALE .0300

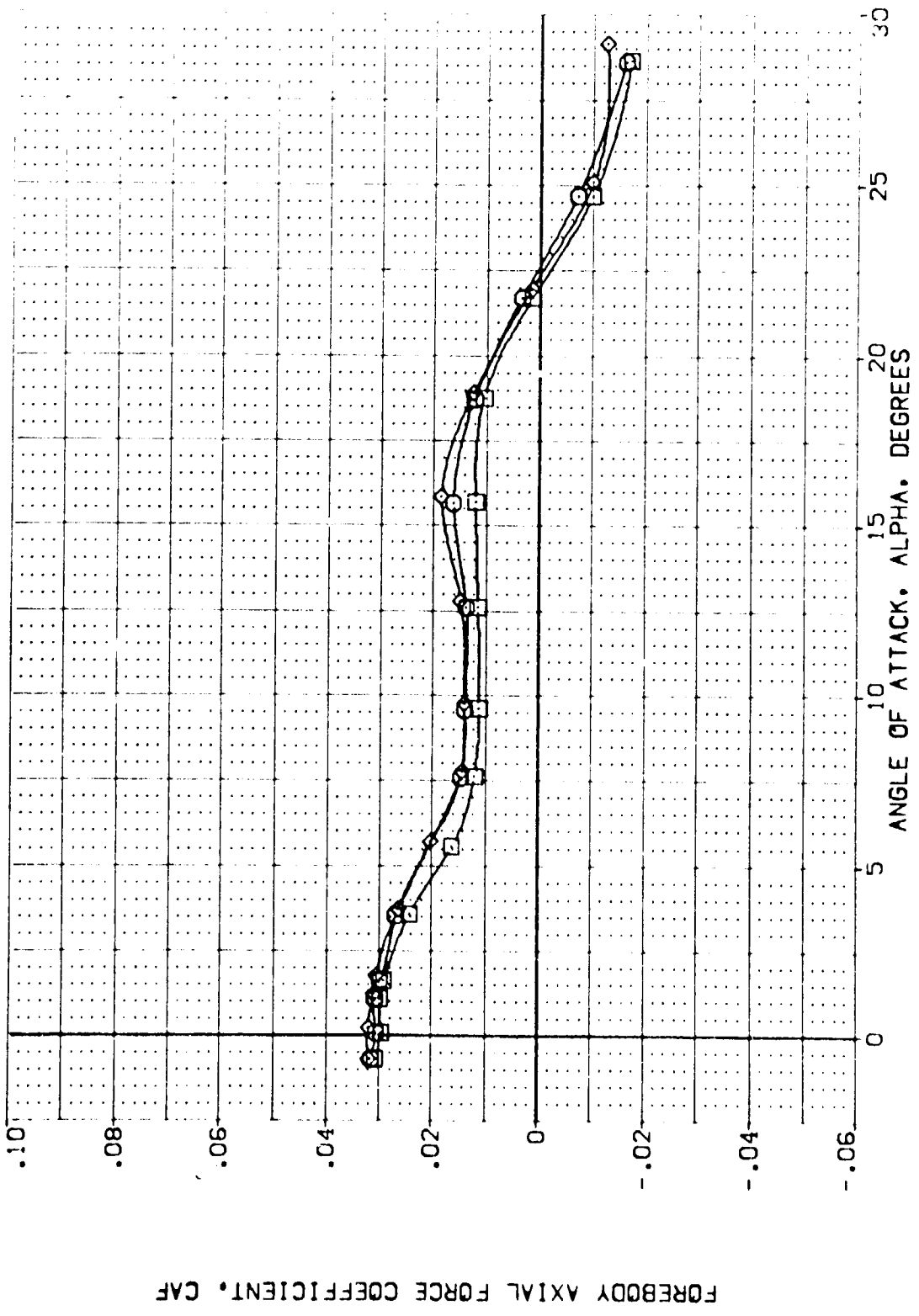


FIG. 8 BODYFLAP EFFECTS

(B)MACH = .80



DATA SET SYMBOL: [TEJ010] [TEJ016] [TEJ011]  
 CONFIGURATION DESCRIPTION: ARC 11-747 BAS3A B C M F VI V NOT: RVUL  
 ARC 11-747 BAS3A B C M F VI V NOT: RVUL  
 ARC 11-747 BAS3A B C M F VI V NOT: RVUL  
 ELEVON: .000 .000 .000  
 AILRON: .000 .000 .000  
 BODYFLAP: 16.300 .000 -11.700  
 SPDBRK: 25.000 25.000 25.000  
 REFERENCE INFORMATION:  
 SREF: 2.4210 SQ.FT.  
 LREF: 14.2440  
 BREF: 28.1004  
 VREF: 32.3010  
 YPRP: .0000  
 ZPRP: 11.2500  
 SCALE: .0300

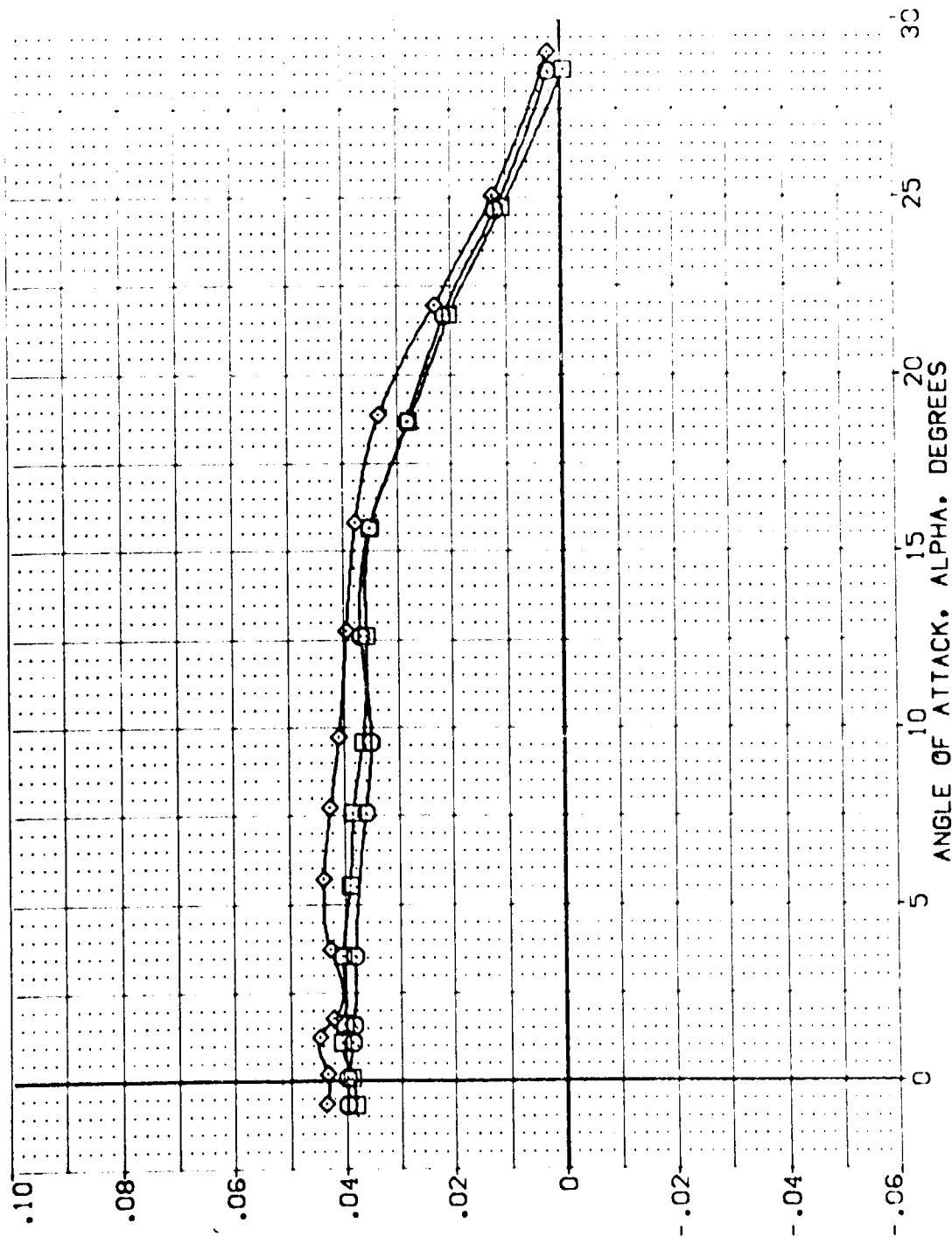


FIG. 8 BODYFLAP EFFECTS

(C)MACH = .90



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVATION	ATTITUDE	BOFLAP	SPDRBK	REFERENCE INFORMATION
(TEJ010)	ARC 11-747 DA53A B C M F VI V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(TEJ016)	ARC 11-747 DA53A B C M F VI V	.000	.000	.000	25.000	LREF 14.2440
(TEJ011)	ARC 11-747 DA53A B C M F VI V	.000	.000	-11.700	25.000	BREF 28.1004
						YREF 32.3010
						ZREF .0000
						SCALE 11.2500
						SCALE .0300

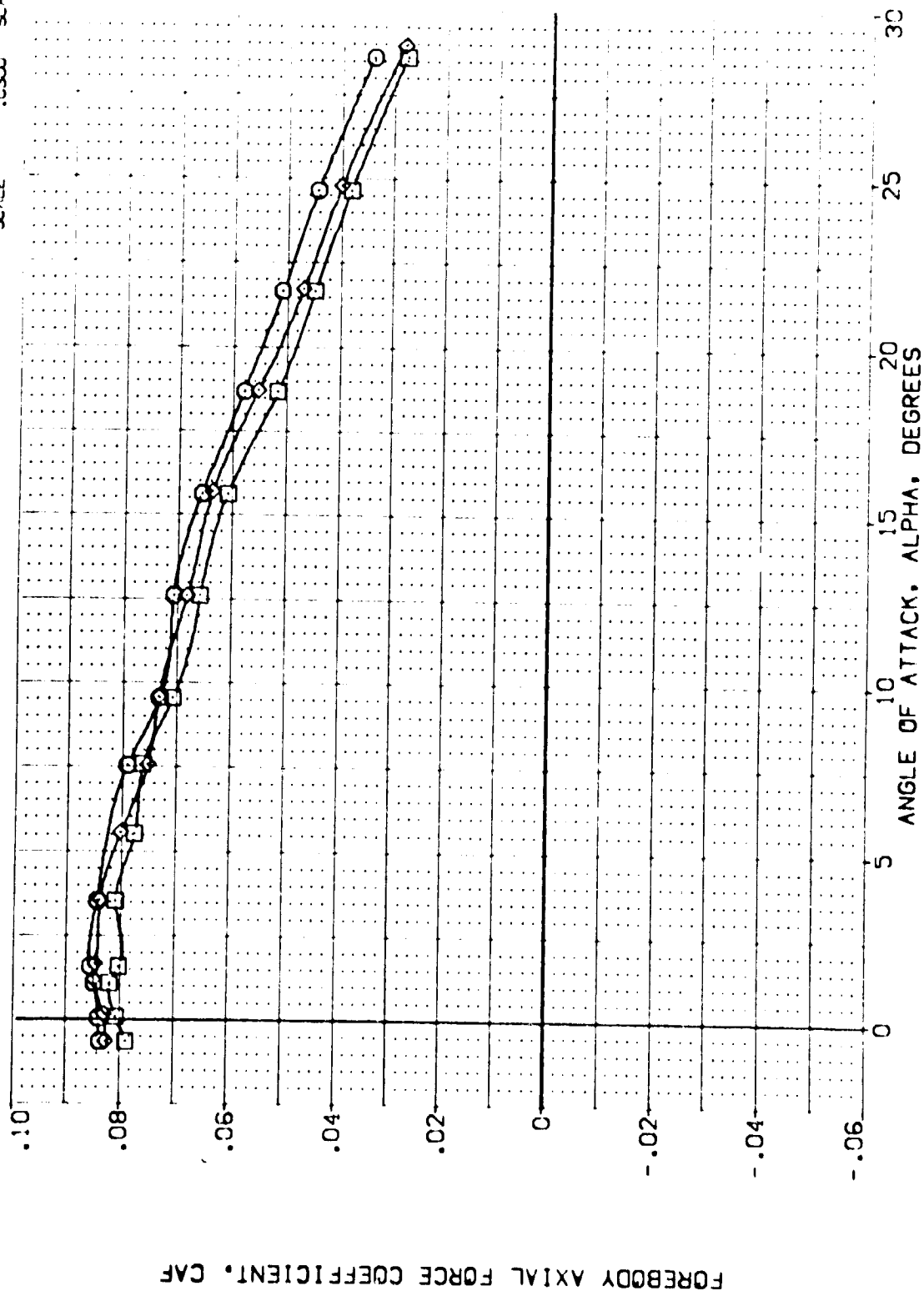


FIG. 8 BODYFLAP EFFECTS

(C)MACH = 1.05

FOREBODY AXIAL FORCE COEFFICIENT, C<sub>AF</sub>

DATA SET SYMBOL CONFIGURATION DESCRIPTION

[TEJ010] ARC 11-747 D453A B C M F V1 V NOM. RV/L

[TEJ016] ARC 11-747 D453A B C M F V1 V NOM. RV/L

[TEJ011] ARC 11-747 D453A B C M F V1 V NOM. RV/L

ELEVON AILRON BOFLAP SPOBRK

.000 .000 .000 25.000

.000 .000 .000 25.000

.000 .000 .000 25.000

REFERENCE INFORMATION

SREF 2.4210 50. FT.

LREF 14.244 IN.

BREF 28.1004 IN.

XMRP 32.3010 IN.

YMRP .0000 IN.

ZMRP 11.2500 IN.

SCALE .0300

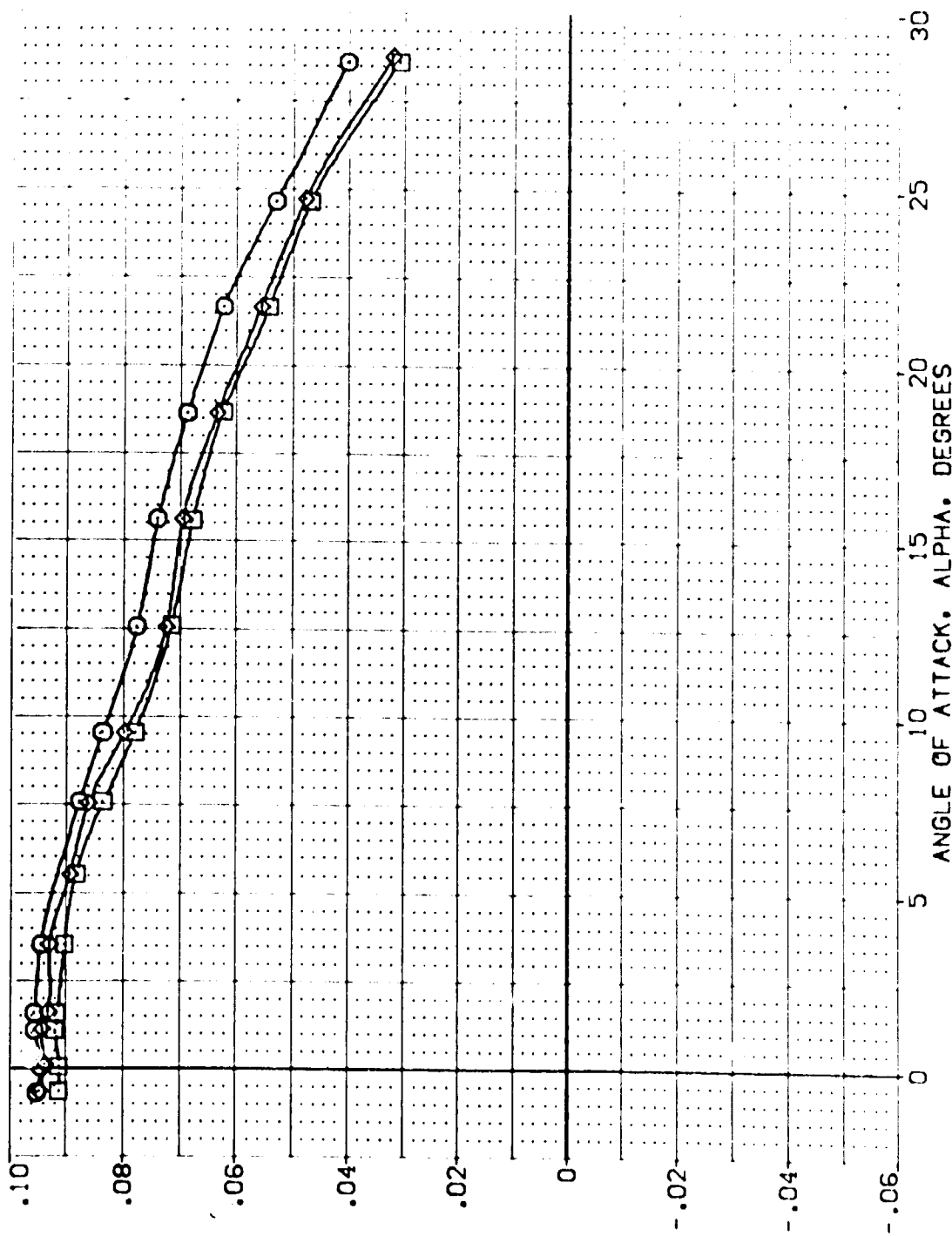


FIG. 8 BODYFLAP EFFECTS

(E)MACH = 1.20

DATA SET SYMBOL		CONFIGURATION DESCRIPTION		ELEVON		AILRON		BODYFLAP		SPORBRK		REFERENCE INFORMATION	
(TEJ010)	ARC	11-747	DA53A B C M F VI V	.000	.000	.000	.000	16.300	25.000	SREF	2.4210	50. FT.	
(TEJ016)	ARC	11-747	DA53A B C M F VI V	.000	.000	.000	.000	16.300	25.000	LREF	14.2440	IN.	
(TEJ011)	ARC	11-747	DA53A B C M F VI V	.000	.000	.000	.000	-11.700	25.000	BREF	28.1004	IN.	
										YMRP	32.3010	IN.	
										ZMRP	.0000	IN.	
										SCALE	11.2500	IN.	
											.0300	SCALE	

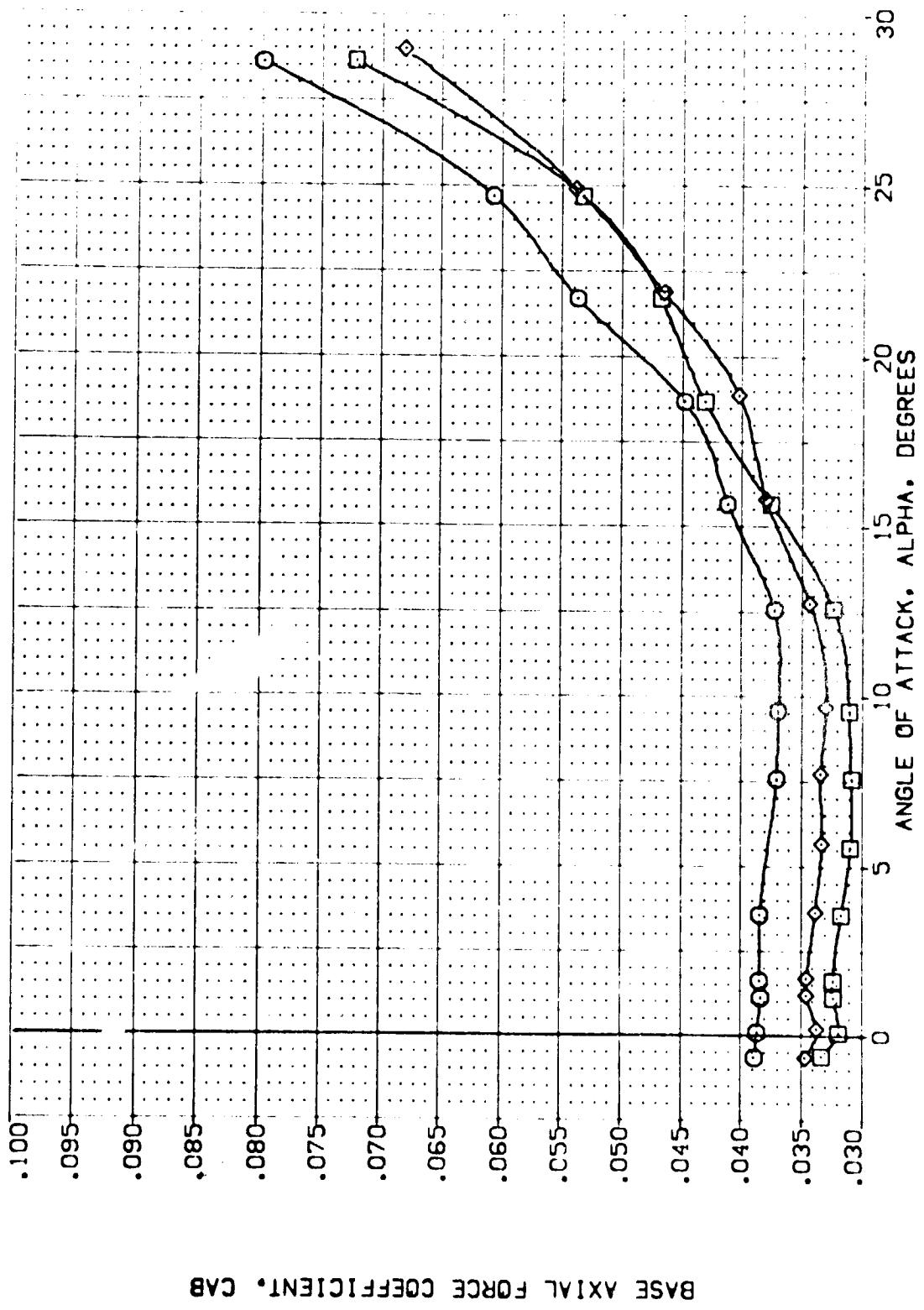


FIG. 8 BODYFLAP EFFECTS

(A)MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPDRBK	REFERENCE INFORMATION
(TEJ010)	ARC 11-747 B A33A B C H F VI V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(TEJ016)	ARC 11-747 B A33A B C H F VI V	.000	.000	.000	25.000	LREF 14.2440
(TEJ011)	ARC 11-747 B A33A B C H F V	.000	.000	-11.700	25.000	BREF 28.1004
						XMRP 32.3010
						YMRP .0000
						ZMRP 11.2500
						SCALE .0300

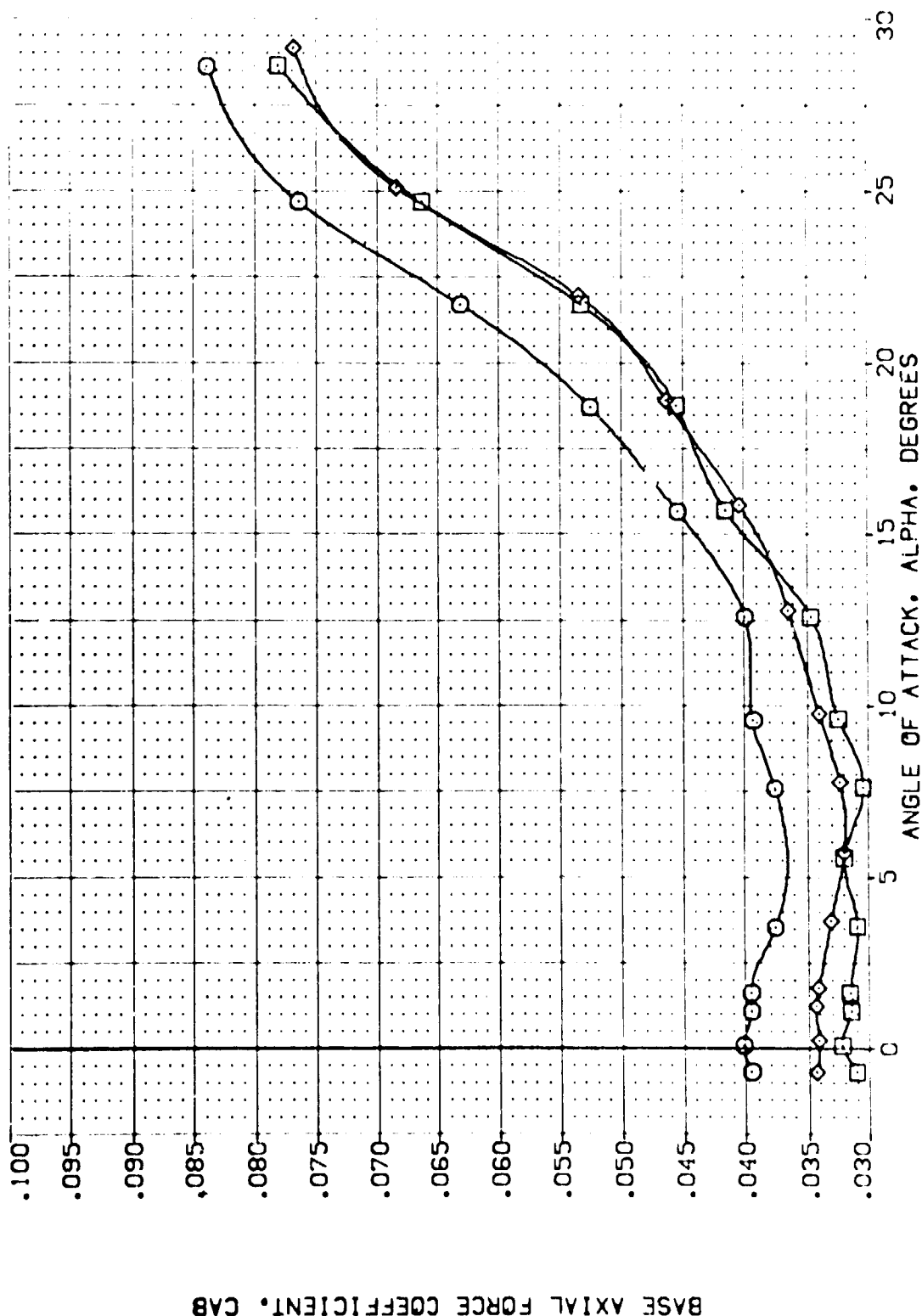


FIG. 8 BODYFLAP EFFECTS

(B)MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPD BRK	REFERENCE INFORMATION
(TEJ010)	ARC 11-747 DAS3A B C H F VI V	.000	.000	16.300	25.000	SREF 2.4210 50. FT.
(TEJ016)	ARC 11-747 DAS3A B C H F VI V	.000	.000	16.300	25.000	LREF 14.2440 IN.
(TEJ011)	ARC 11-747 DAS3A B C H F VI V	.000	.000	-11.700	25.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300 SCALE

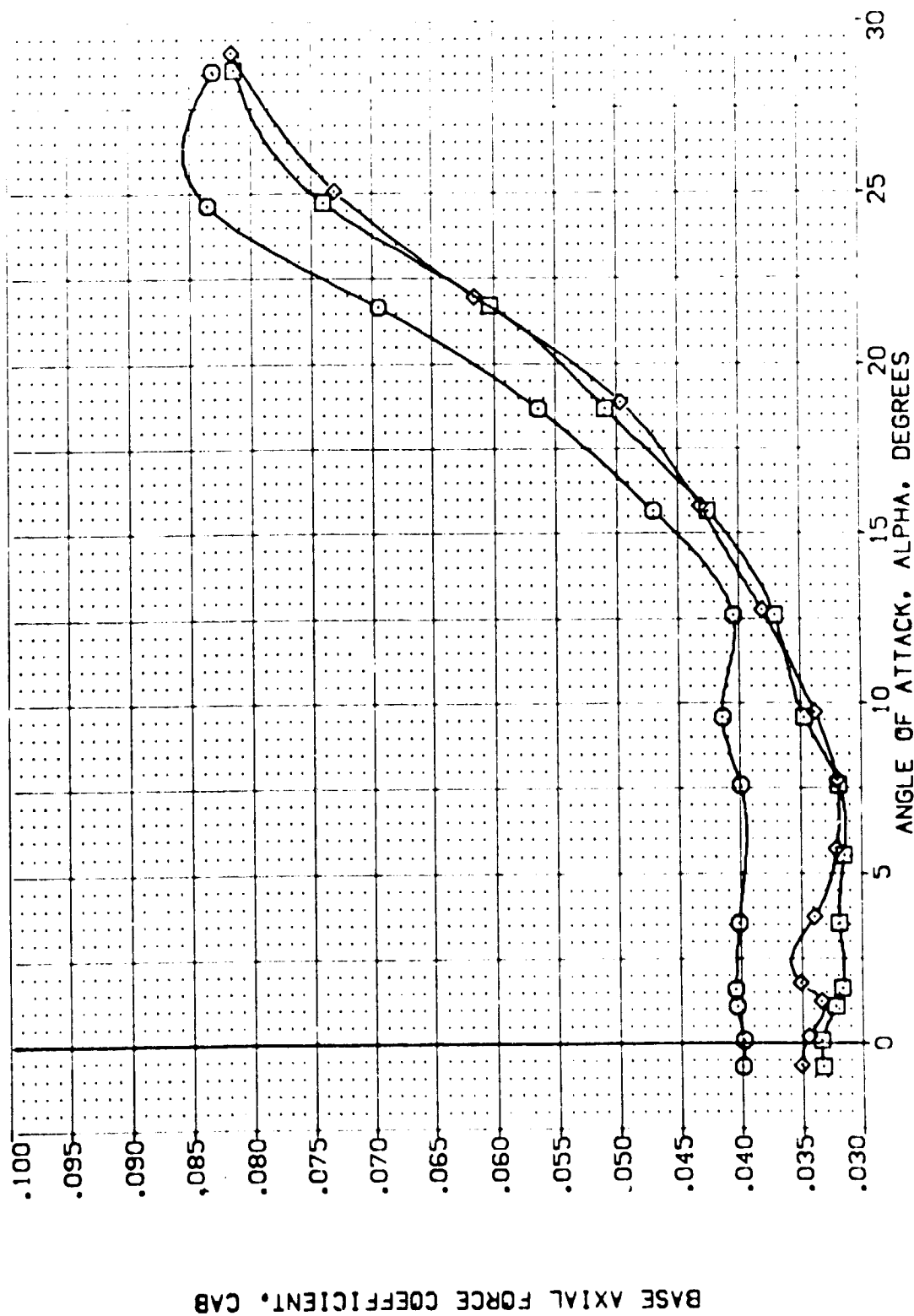


FIG. 8 BODYFLAP EFFECTS

(C)MACH = .90

DATA SET SYMBOL CONFIGURATION DESCRIPTION

[TEJ010]	ARC 11-747	BAS3A	B	C	H	F	VI	V	NON-RNVL
[TEJ016]	ARC 11-747	DA53A	B	C	H	F	VI	V	NON-RNVL
[TEJ011]	ARC 11-747	DA53A	B	C	H	F	VI	V	NON-RNVL

ELEVON  
.000  
.000  
.000

AILERON  
.000  
.000  
.000

BOFLAP  
16.300  
.000  
-11.700

SPDBRK  
25.000  
25.000  
25.000

REFERENCE INFORMATION

SREF	2.4210	SQ.FT.
LREF	14.2440	
BREF	28.1004	
XMRP	32.3010	
YMRP	.0000	
ZMRP	11.2500	
SCALE	.0300	

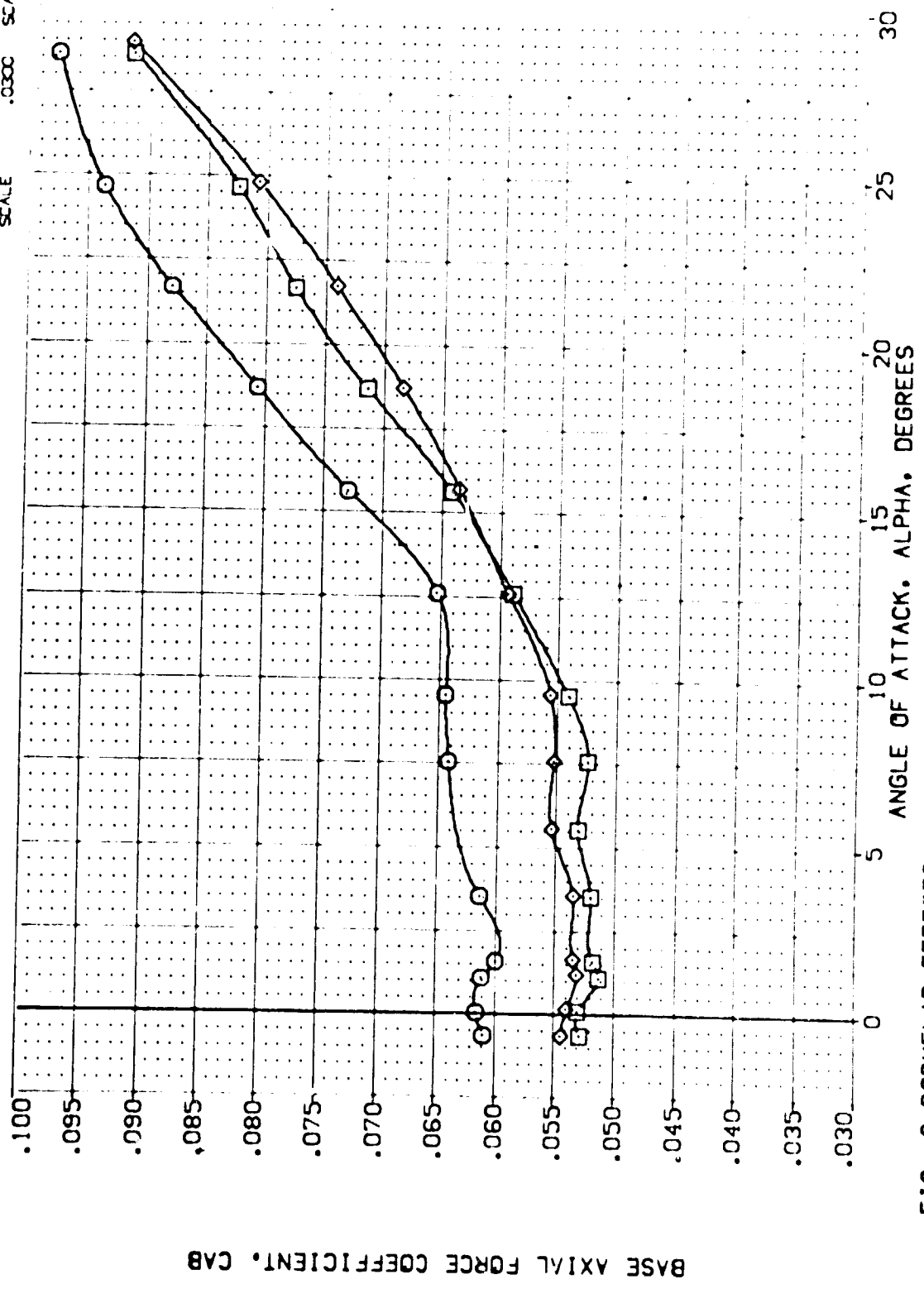


FIG. 8 BODYFLAP EFFECTS

(C)MACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOJLAP	SPOBRK	REFERENCE INFORMATION
(TEJ010)	ARC 11-747 OAS3A B C M F V	.000	.000	16.300	25.000	SREF 2.4210 50. FT.
(TEJ016)	ARC 11-747 OAS3A B C M F V	.000	.000	.000	25.000	LREF 14.2440 IN.
(TEJ011)	ARC 11-747 OAS3A B C M F V	.000	.000	-11.700	25.000	BREF 28.1004 IN.
						XTRP 32.3010 IN.
						ZTRP .0000 IN.
						SCALE 11.2500 IN.
						SCALE .0300

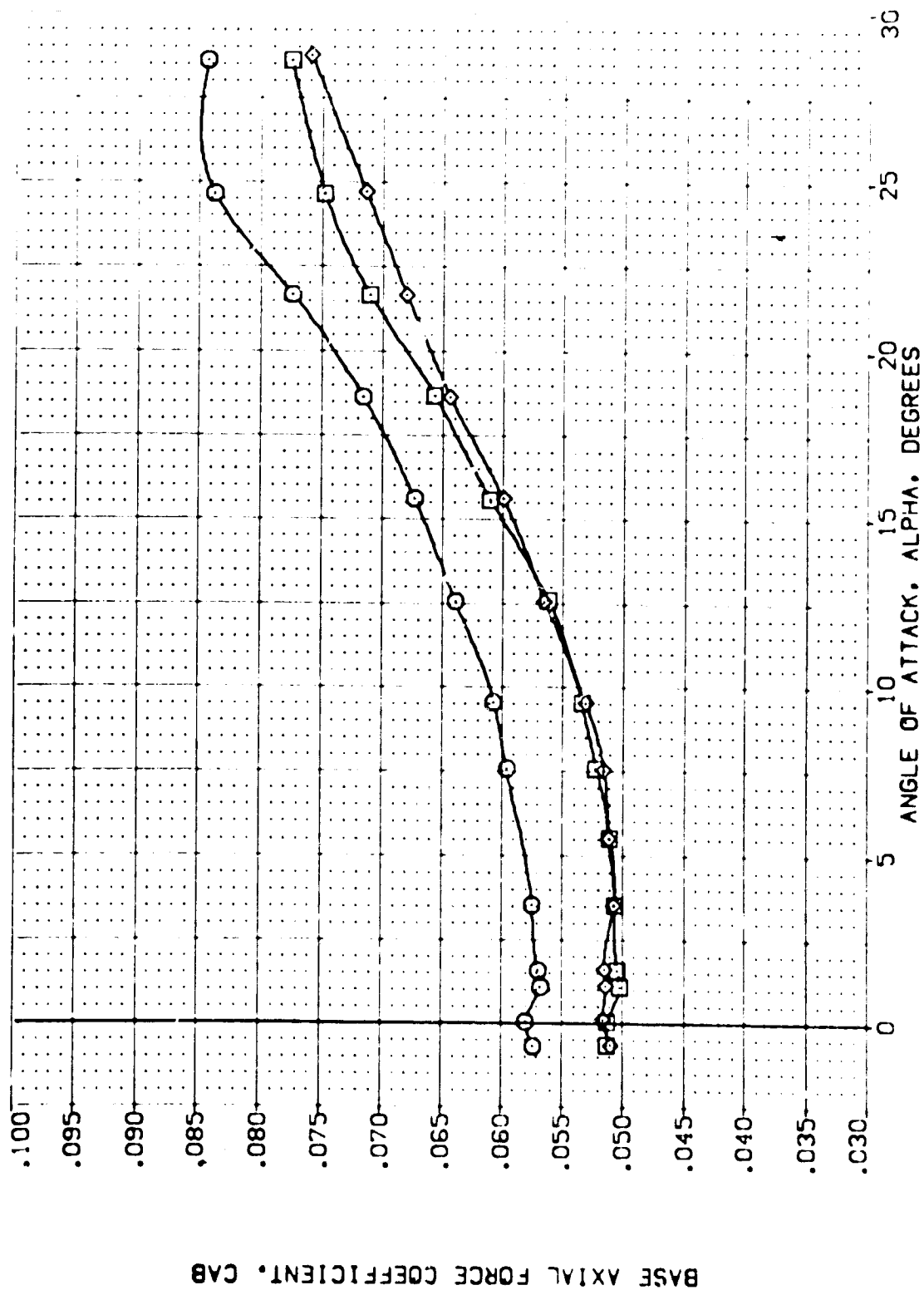


FIG. 8 BODYFLAP EFFECTS

(E)MAC = 1.20



DATA SET SYMBOL    CONFIGURATION DESCRIPTION    ELEVON    AIRLON    BODYFLAP    SPIDBRK    REFERENCE INFORMATION

(TEJ010)	ARC 11-747 BA53A B C M F V1 V	.000	.000	16.300	25.000	SREF	2.4210	SC.FT.
(TEJ016)	ARC 11-747 BA53A B C M F V1 V	.000	.000	.000	25.000	LREF	14.2440	
(TEJ011)	ARC 11-747 BA53A B C M F V1 V	.000	.000	-11.700	25.000	BREF	28.1004	
						XMRP	32.9010	
						ZMRP	.0000	
						SCALE	11.2500	
							.0300	

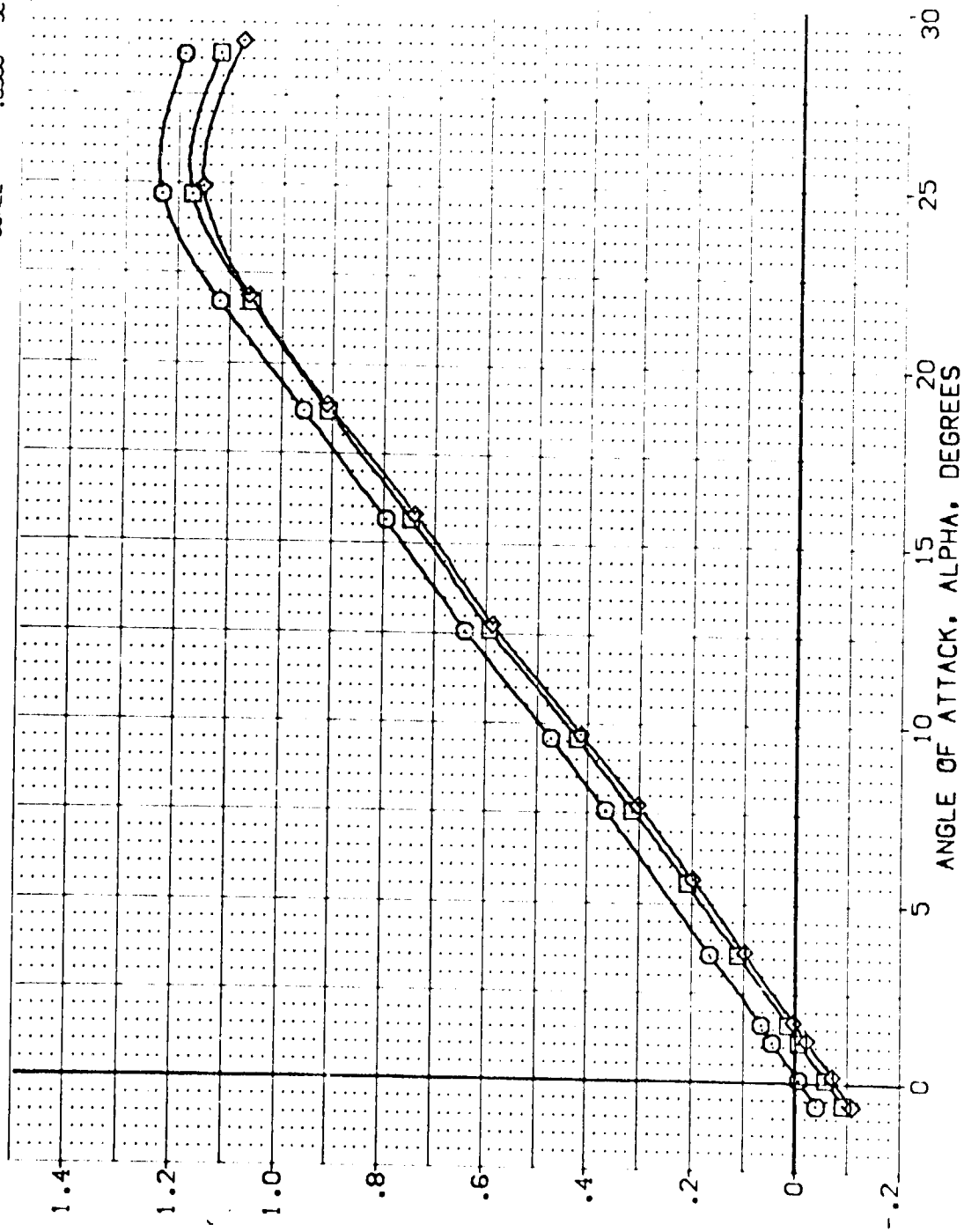


FIG. 8 BODYFLAP EFFECTS

(MACH = .60)



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPOBRK	REFERENCE INFORMATION
(TEJ010)	ARC 11-747 DA53A B C M F V1 V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(TEJ016)	ARC 11-747 DA53A B C M F V1 V	.000	.000	.000	25.000	LREF 14.2440 IN.
(TEJ011)	ARC 11-747 DA53A B C M F V1 V	.000	.000	-11.700	25.000	BREF 28.1004 IN.
						YMRP 32.3010 IN.
						ZMRP .0000 IN.
						SCALE 11.2500 IN.
						SCALE .0300

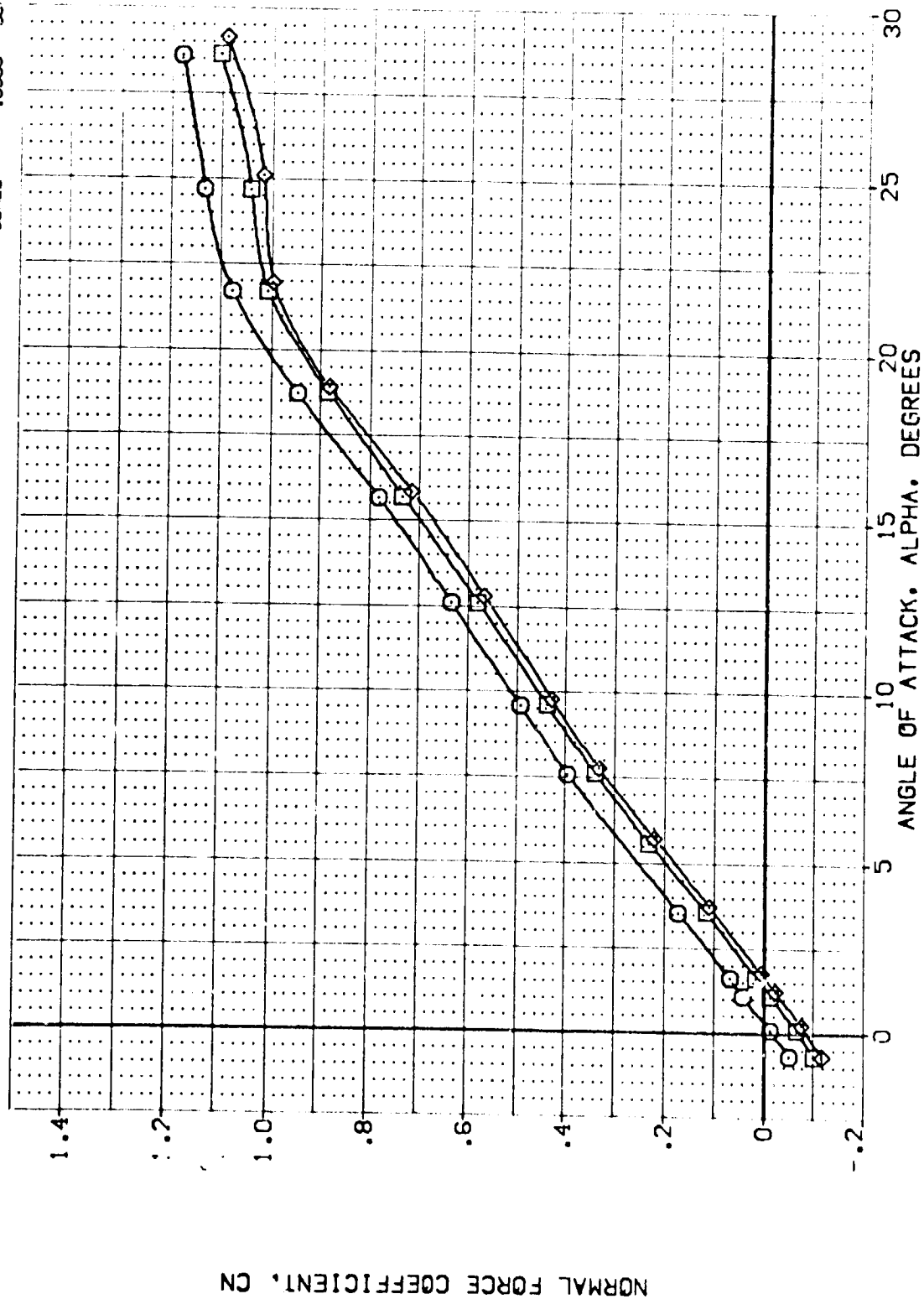


FIG. 8 BODYFLAP EFFECTS

(B)MACH = .80

DATA SET SYMBOL CONFIGURATION DESCRIPTION

ARC 11-747	BA53A	B	C	M	F	V	V	NOT: RV/L
ARC 11-747	BA53A	B	C	M	F	V	V	NOT: RV/L
ARC 11-747	BA53A	B	C	M	F	V	V	NOT: RV/L

ELEVON AILURON BOFLAP SPEEDBKR

.000	.000	16.300	25.000
.000	.000	.000	25.000
.000	.000	-11.700	25.000

REFERENCE INFORMATION

SREF	2.4210	SG.F.T.
LREF	14.2440	
BREF	28.1000	
XMRP	32.3000	
YMRP	.0000	
ZMRP	11.2500	
SCALE	.0300	

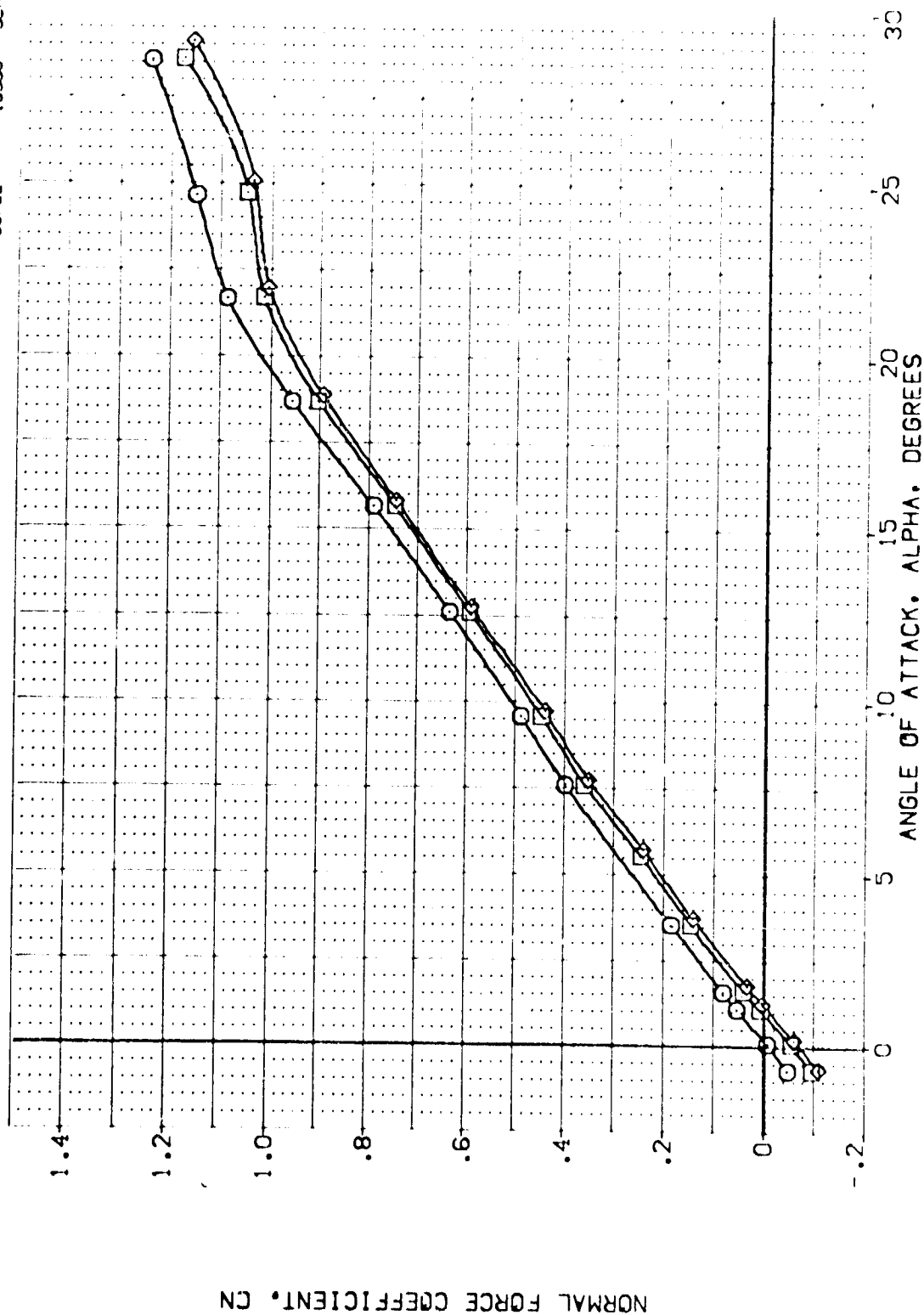


FIG. 8 BODYFLAP EFFECTS

(C)MACH = .90



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BODY LAP	SPD BRK	REFERENCE INFORMATION
{TEJO:10}	ARC 11-747 B A33A B C M F VI V	.000	.000	16.300	25.000	SREF 2.4210 SC.FT.
{TEJO:16}	ARC 11-747 B A33A B C M F VI V	.000	.000	.000	25.000	LREF 14.2440
{TEJO:11}	ARC 11-747 B A33A B C M F VI V	.000	.000	-11.700	25.000	BREF 28.1004
						XREF 32.3010
						YREF 0.0000
						ZREF 11.2500
						SCALE 0.0000

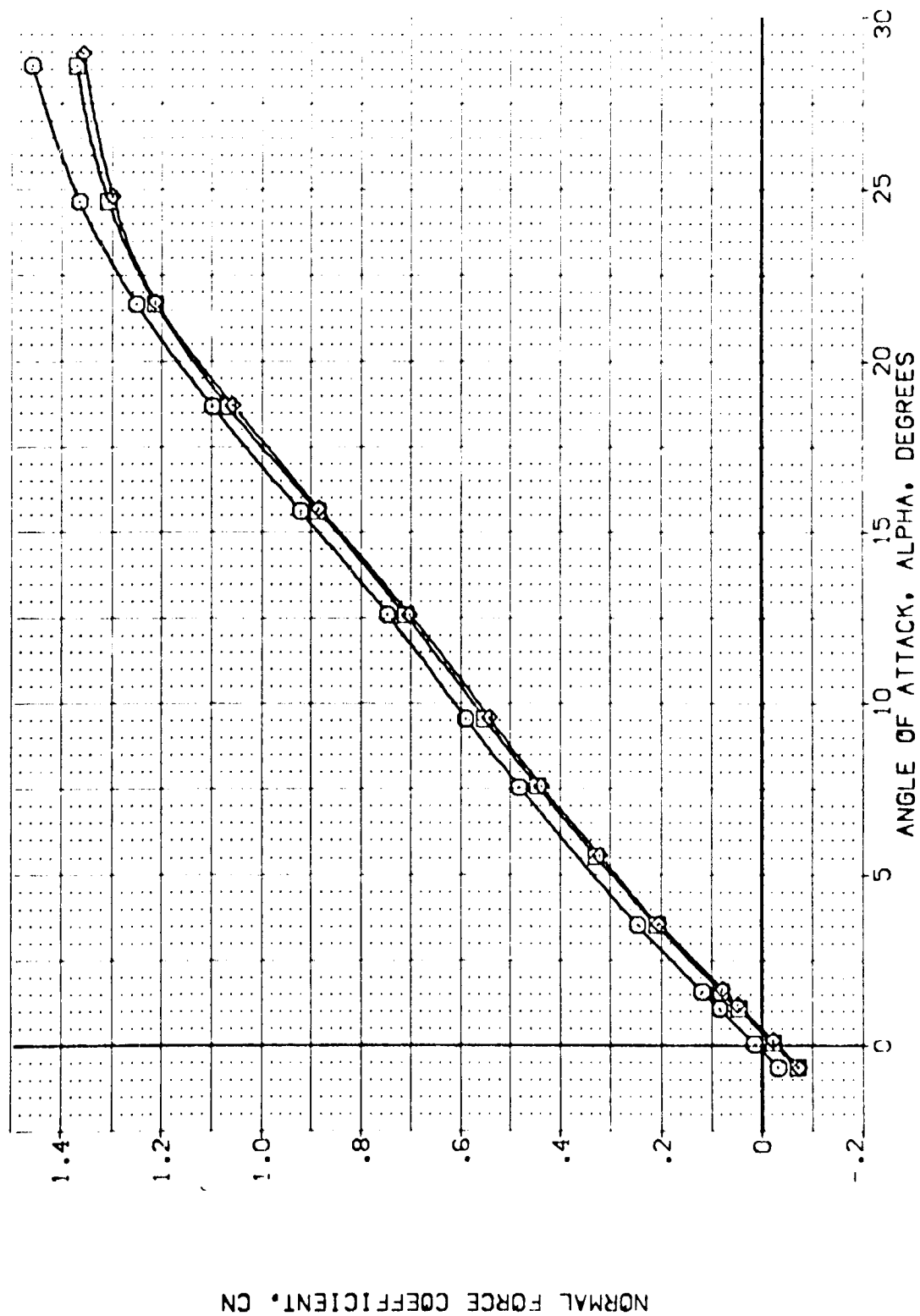


FIG. 8 BODYFLAP EFFECTS

(C)MACH = 1.05



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AIRLON	BOFLAP	SPOBRK	REFERENCE INFORMATION
{TEJ010}	ARC 11-747 BAS3A B C M F VI V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
{TEJ016}	ARC 11-747 BAS3A B C M F VI V	.000	.000	.000	25.000	LREF 14.2440 IN.
{TEJ011}	ARC 11-747 BAS3A B C M F VI V	.000	.000	-11.700	25.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

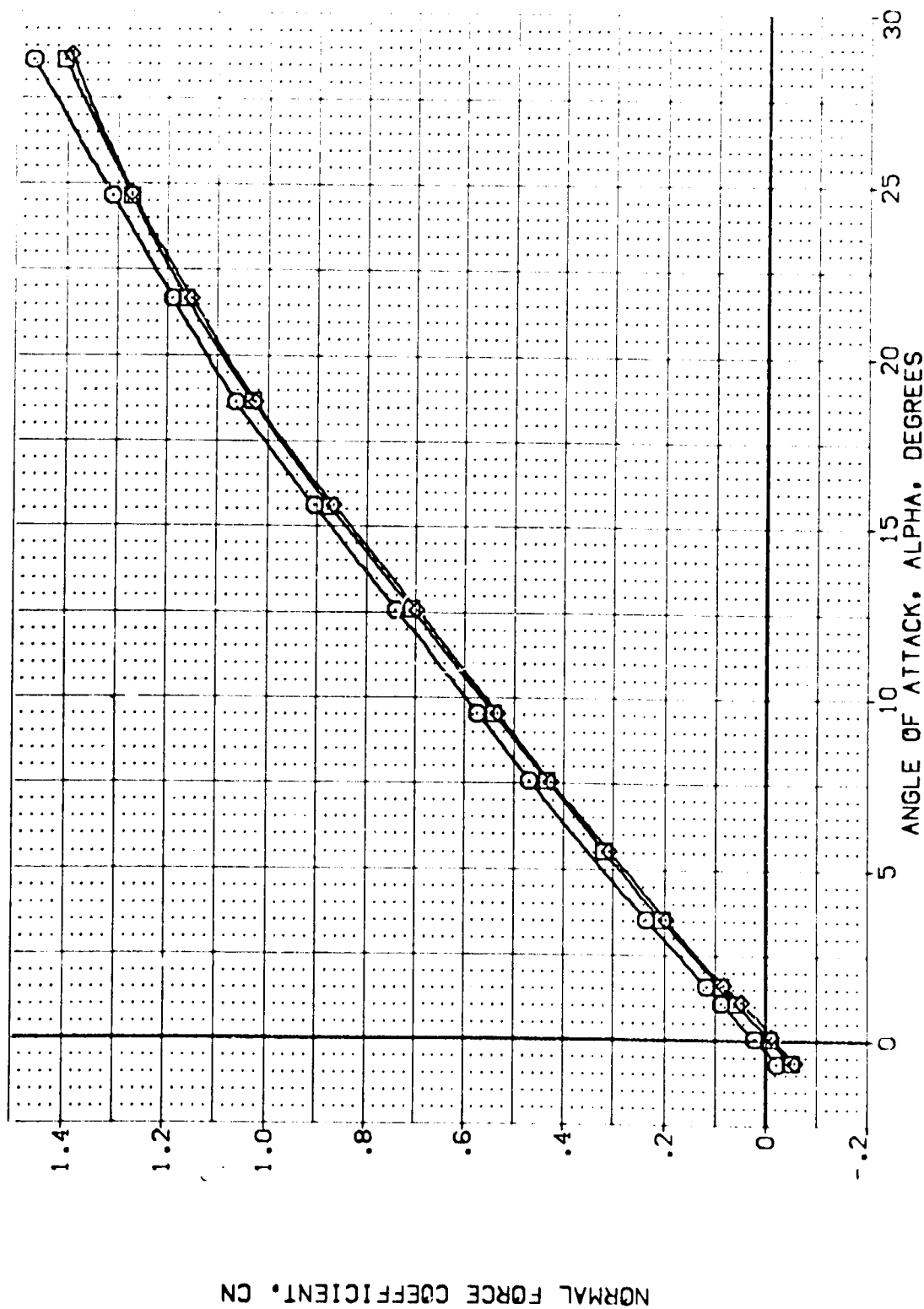
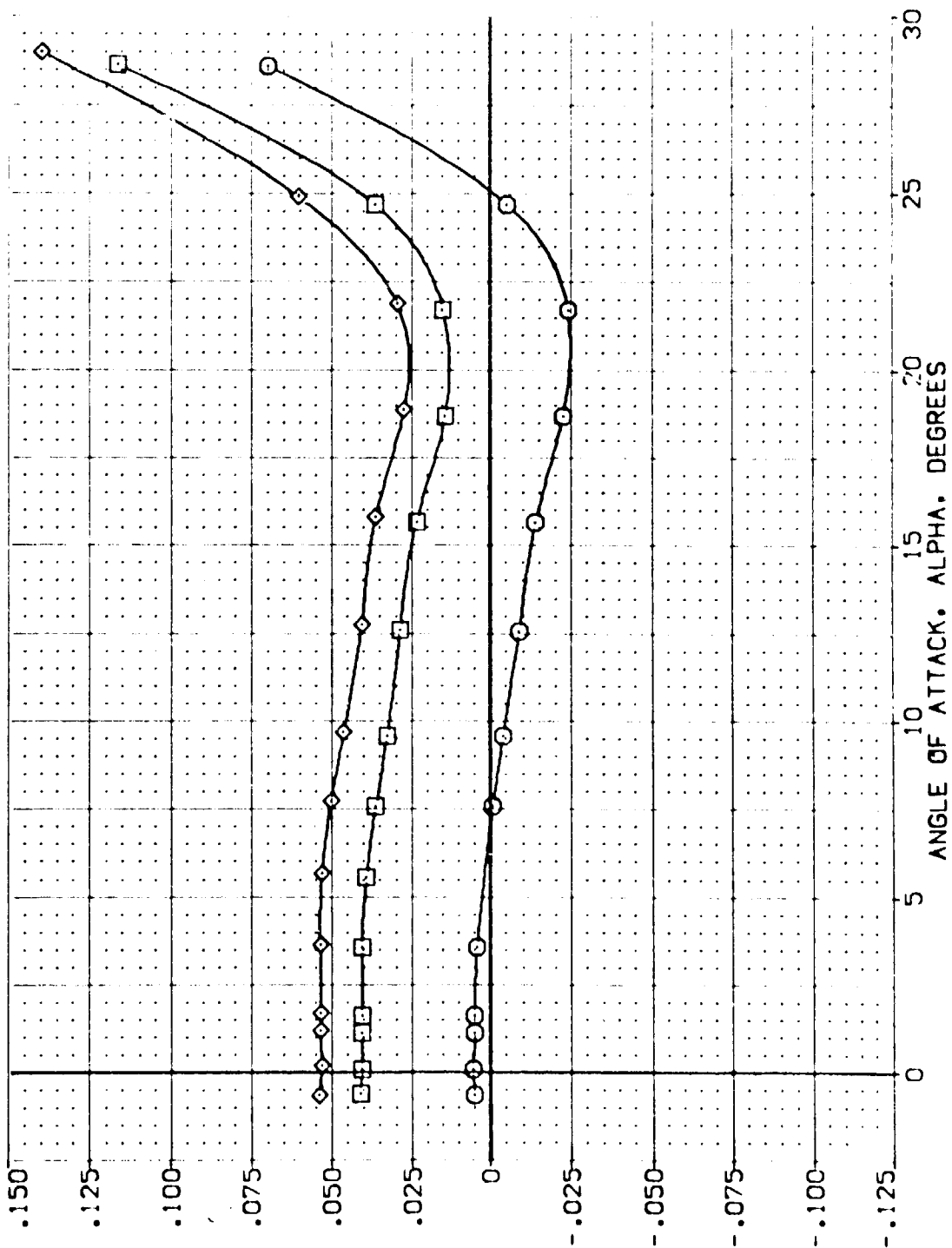


FIG. 8 BODYFLAP EFFECTS

(E)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BODYFLAP	SPD BRK	REFERENCE INFORMATION
{TEJ010}	ARC 11-747 BA53A B C H F VI V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
{TEJ016}	ARC 11-747 BA53A B C H F VI V	.000	.000	.000	25.000	LREF 14.2440 IN.
{TEJ011}	ARC 11-747 BA53A B C H F VI V	.000	.000	-11.700	25.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300



PITCHING MOMENT COEFFICIENT (FWD C.G.), CLMFW

FIG. 8 BODYFLAP EFFECTS

(A)MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVATION	AIRLIFT	BODY FLAP	SPD BRK	REFERENCE INFORMATION
(TEJ010)	ARC 11-747 BA53A B C M F VI V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(TEJ016)	ARC 11-747 BA53A B C M F VI V	.000	.000	.000	25.000	LREF 14.2440
(TEJ011)	ARC 11-747 BA53A B C M F VI V	.000	.000	-11.700	25.000	BREF 28.1004
						XREF 32.3010
						YREF .0000
						ZREF 11.2500
						SCALE .6300

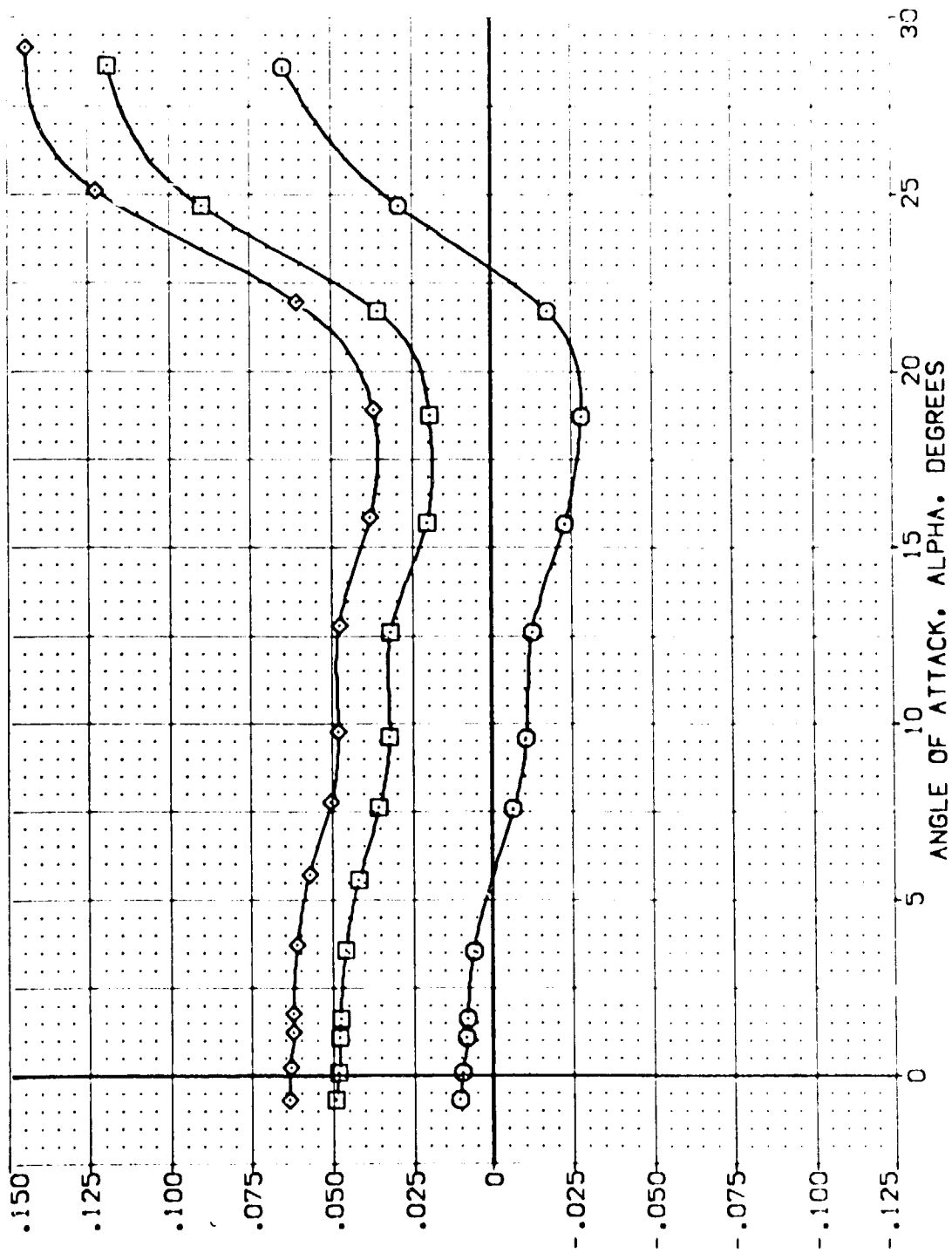


FIG. 8 BODYFLAP EFFECTS

(B)MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPD00RK	REFERENCE INFORMATION
(TE010)	ARC 11-747 OAS3A B C M F VI V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(TE016)	ARC 11-747 OAS3A B C M F VI V	.000	.000	.000	25.000	LREF 14.2440 IN.
(TE011)	ARC 11-747 OAS3A B C M F VI V	.000	.000	-11.700	25.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

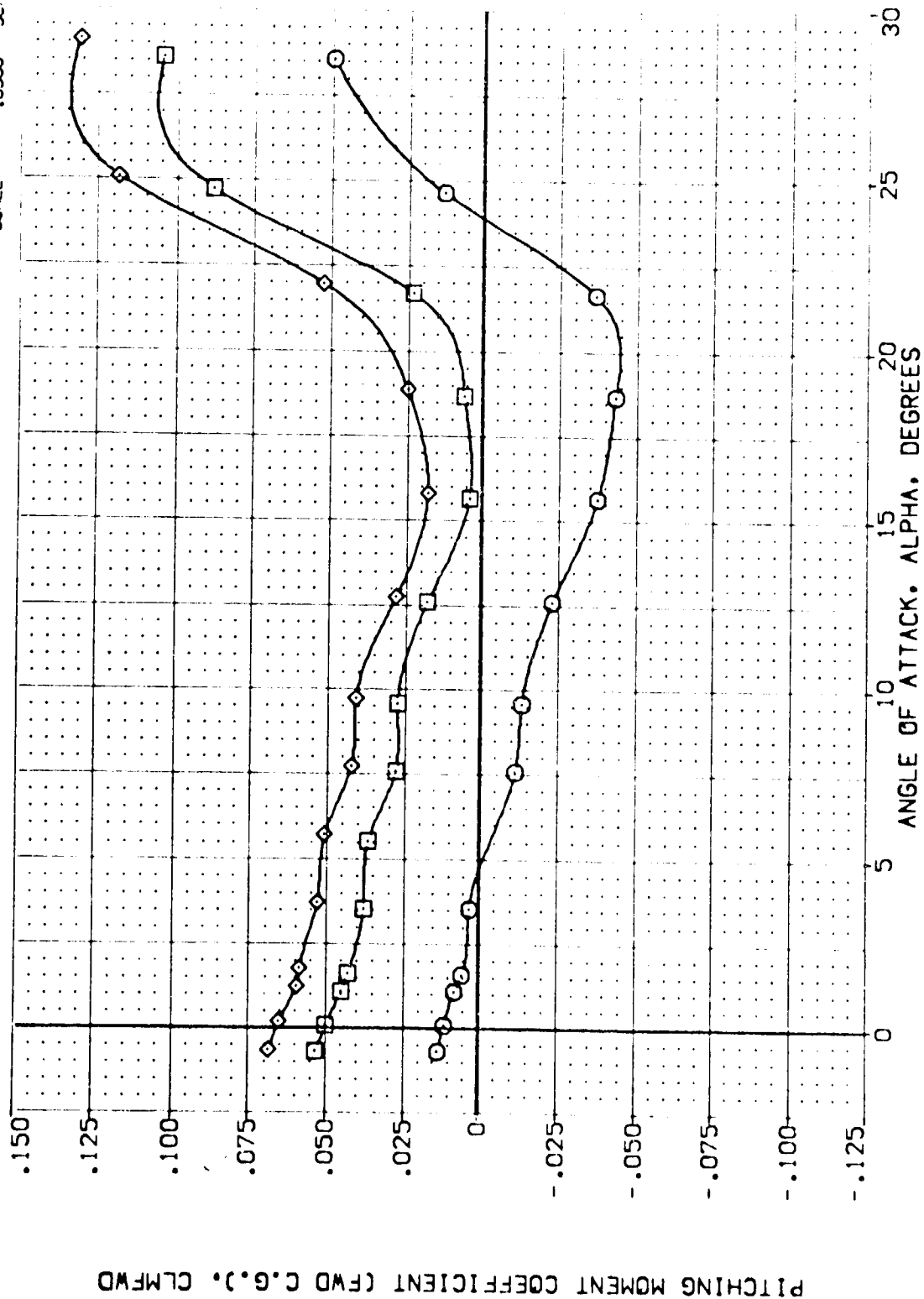


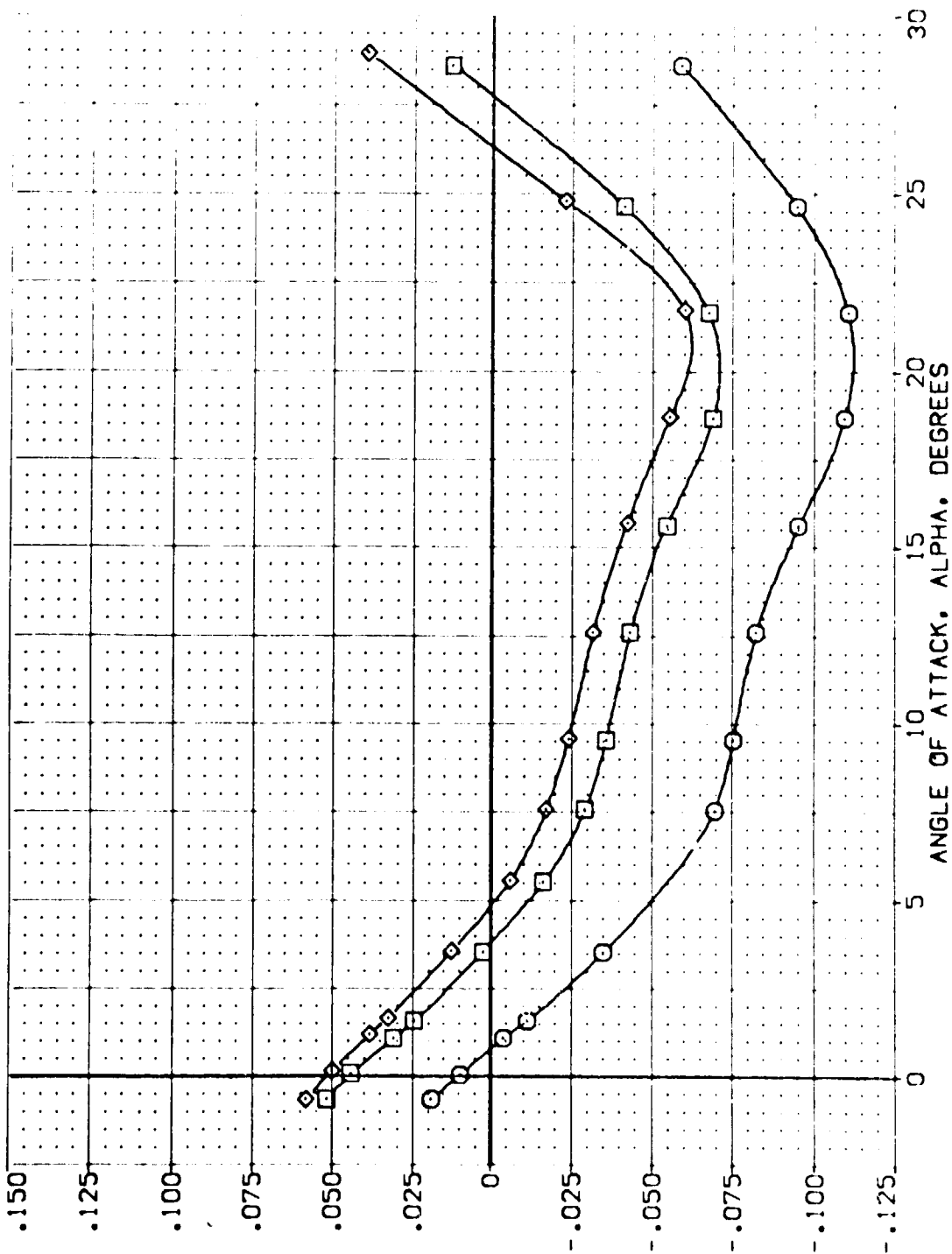
FIG. 8 BODYFLAP EFFECTS

(C)MACH = .90





DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPDBRK	REFERENCE INFORMATION
(TEJ010)	ARC 11-747 BAS3A B C M F VI V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(TEJ016)	ARC 11-747 BAS3A B C M F VI V	.000	.000	.000	25.000	LREF 14.2440 IN.
(TEJ011)	ARC 11-747 BAS3A B C M F VI V	.000	.000	-11.700	25.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP 11.0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

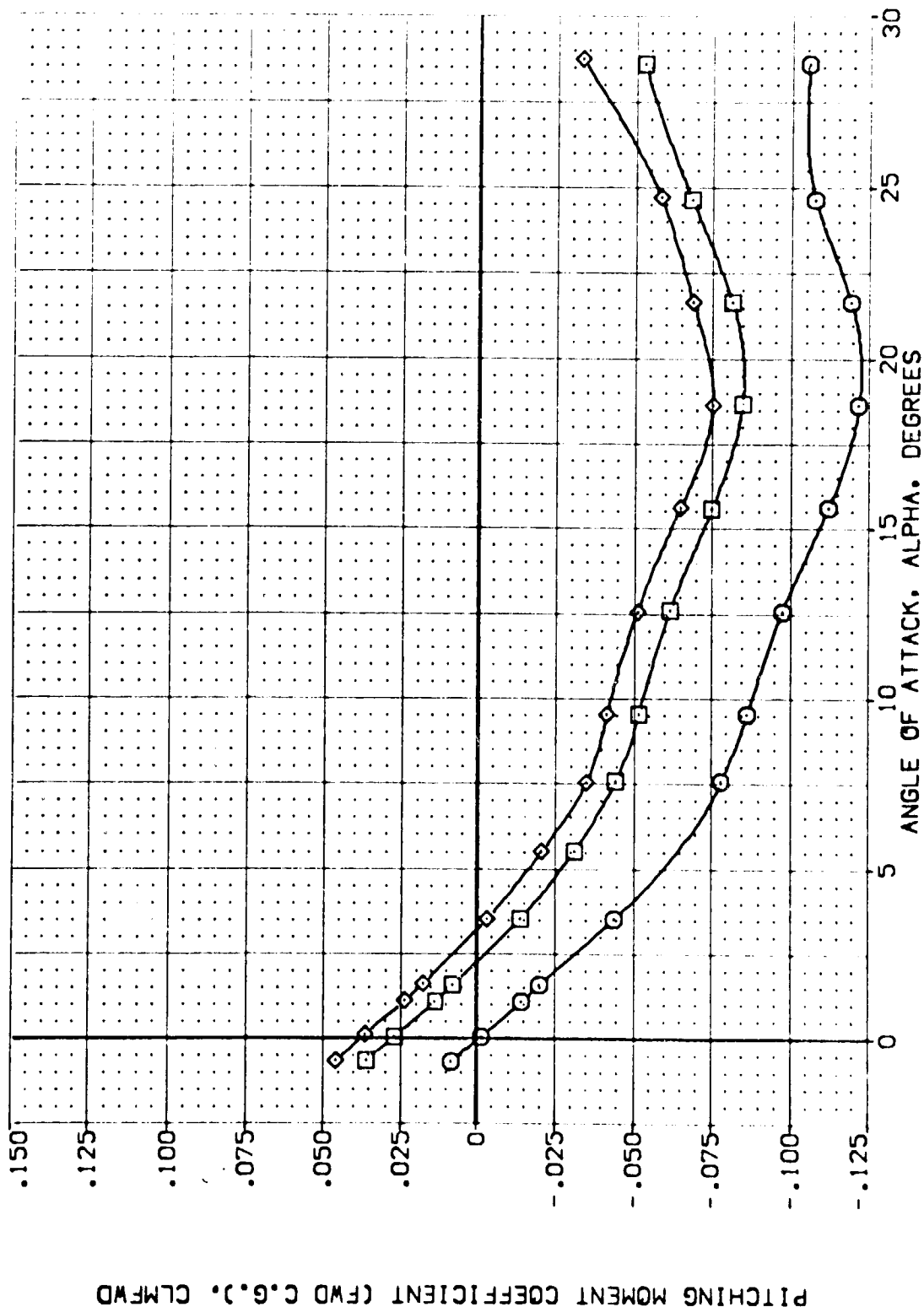


PITCHING MOMENT COEFFICIENT (FWD C.G.), CLMFW

FIG. 8 BODYFLAP EFFECTS

(C)MACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPDBRK	REFERENCE INFORMATION
(TEJ010)	ARC 11-747 OAS3A B C M F VI V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(TEJ016)	ARC 11-747 OAS3A B C M F VI V	.000	.000	.000	25.000	LREF 14.2440 IN.
(TEJ011)	ARC 11-747 OAS3A B C M F VI V	.000	.000	-11.700	25.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						ZMRP 11.2500 IN.
						SCALE .0300



PITCHING MOMENT COEFFICIENT (FWD C.G.), CLMFW

FIG. 8 BODYFLAP EFFECTS

(C)MACH = 1.20

DATA SET SYMBOL: (TEJ010) (TEJ016) (TEJ011)

CONFIGURATION DESCRIPTION: ARC 11-747 BASSA B C H F VI V NON: RV/L ARC 11-747 BASSA B C H F VI V NON: RV/L ARC 11-747 BASSA B C H F VI V NON: RV/L

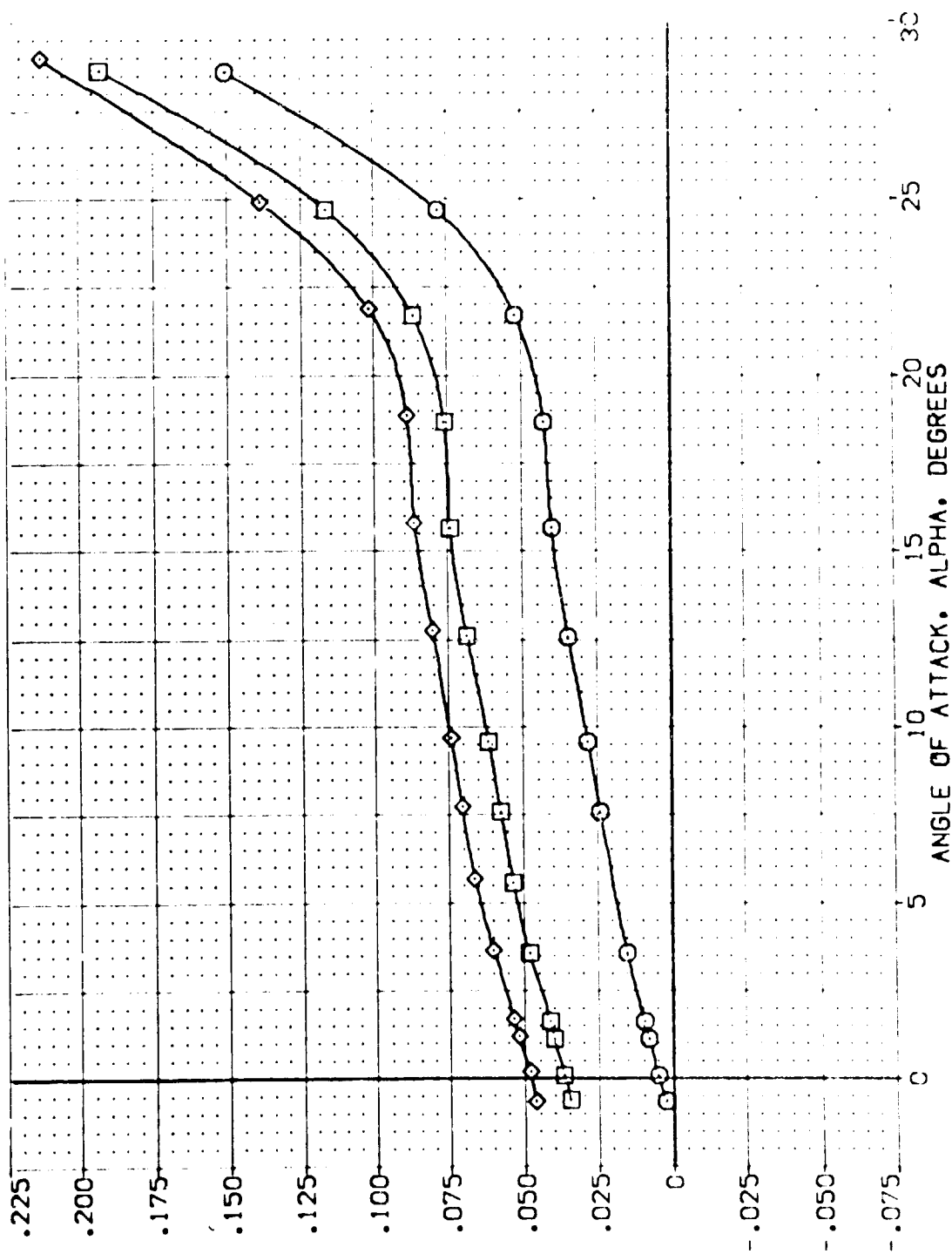
ELEVATION: .000 .000 .000

ALLRON: .000 .000 .000

BOFLAP: 16.300 .000 -11.700

SPOBRK: 25.000 25.000 25.000

REFERENCE INFORMATION: SREF 2.4210 50.F.T. LREF 14.2440 BREF 28.1004 XMRP 32.5010 YMRP 11.0000 ZMRP 11.2300 SCALE .0300

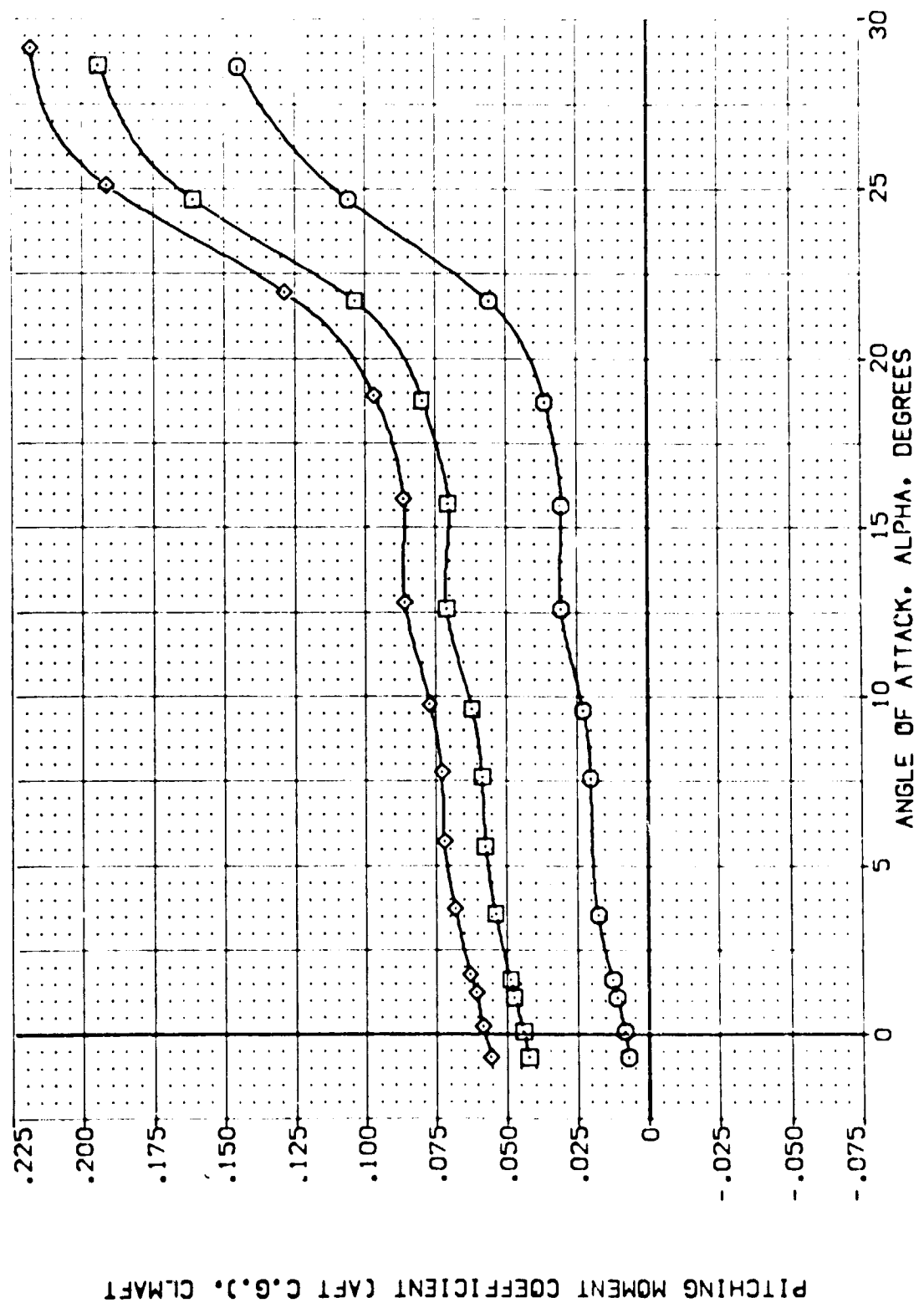


PITCHING MOMENT COEFFICIENT (Cm) C.G., CLMAFT

FIG. 8 BODYFLAP EFFECTS

(A) MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BD FLAP	SPOBRK	REFERENCE INFORMATION
{TEJ010}	ARC 11-747 BA53A B C M F V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
{TEJ016}	ARC 11-747 BA53A B C M F V	.000	.000	.000	25.000	LREF 14.2440 IN.
{TEJ011}	ARC 11-747 BA53A B C M F V	.000	.000	-11.700	25.000	BREF 28.1004 IN.
						YMRP 32.3010 IN.
						ZMRP .0000 IN.
						SCALE 11.2500 IN.



PITCHING MOMENT COEFFICIENT (CFT C.G.), CLMAFT

FIG. 8 BODYFLAP EFFECTS

(B)MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPOILER	REFERENCE INFORMATION
(TEJ010)	ARC 11-747 B453A B C H F VI V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(TEJ016)	ARC 11-747 B453A B C H F VI V	.000	.000	.000	25.000	LREF 14.2440 IN.
(TEJ011)	ARC 11-747 B453A B C H F VI V	.000	.000	-11.700	25.000	BREF 28.1004 IN.
						XREF 32.3010 IN.
						YREF 0.0000 IN.
						ZREF 11.2500 IN.
						SCALE .0300

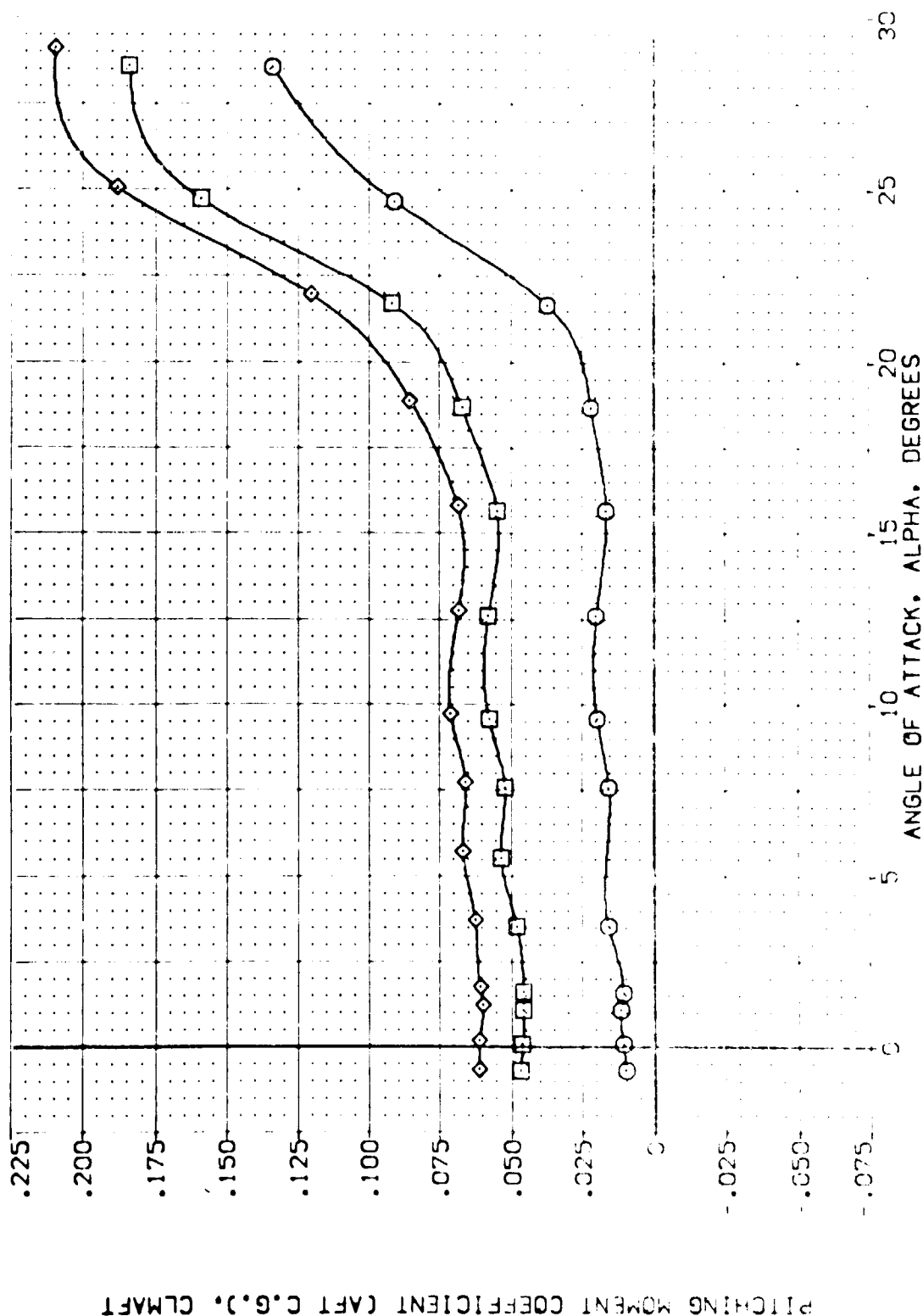


FIG. 8 BODYFLAP EFFECTS

(C)MACH = .90

DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 (TEFO10) ARC 11-747 OAS3A B C H F VI V  
 (TEFO16) ARC 11-747 OAS3A B C H F VI V  
 (TEFO11) ARC 11-747 OAS3A B C H F VI V

ELEVON  
 .000  
 .000  
 .000

AILERON BOFLAP SPOILER  
 .000 16.300 25.000  
 .000 .000 25.000  
 .000 -11.700 25.000

REFERENCE INFORMATION  
 SREF 2.4210 SQ.FT.  
 LREF 14.2440 IN.  
 BREF 28.1004 IN.  
 XMRP 32.3010 IN.  
 YMRP .0000 IN.  
 ZMRP 11.2500 IN.  
 SCALE .0300

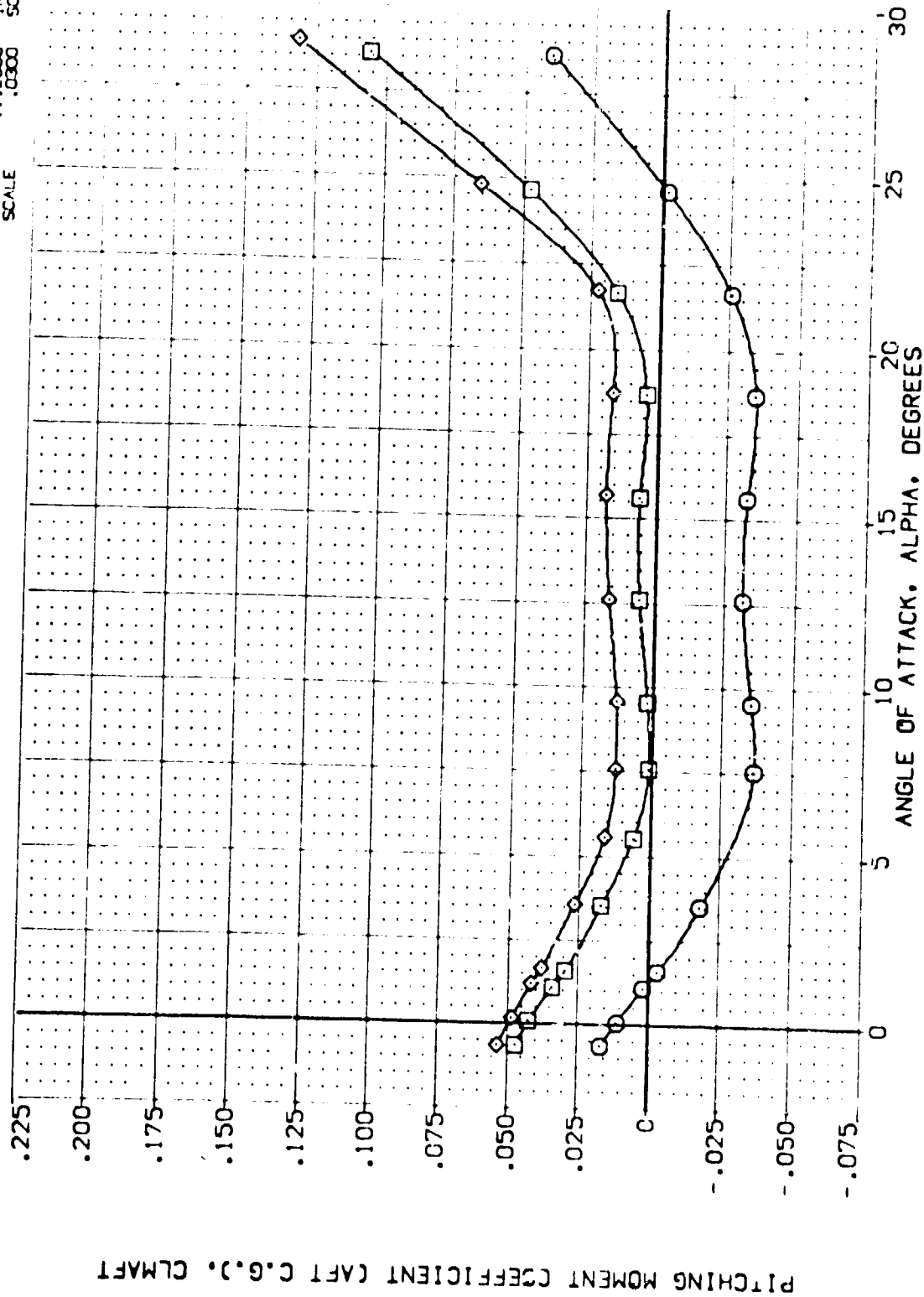
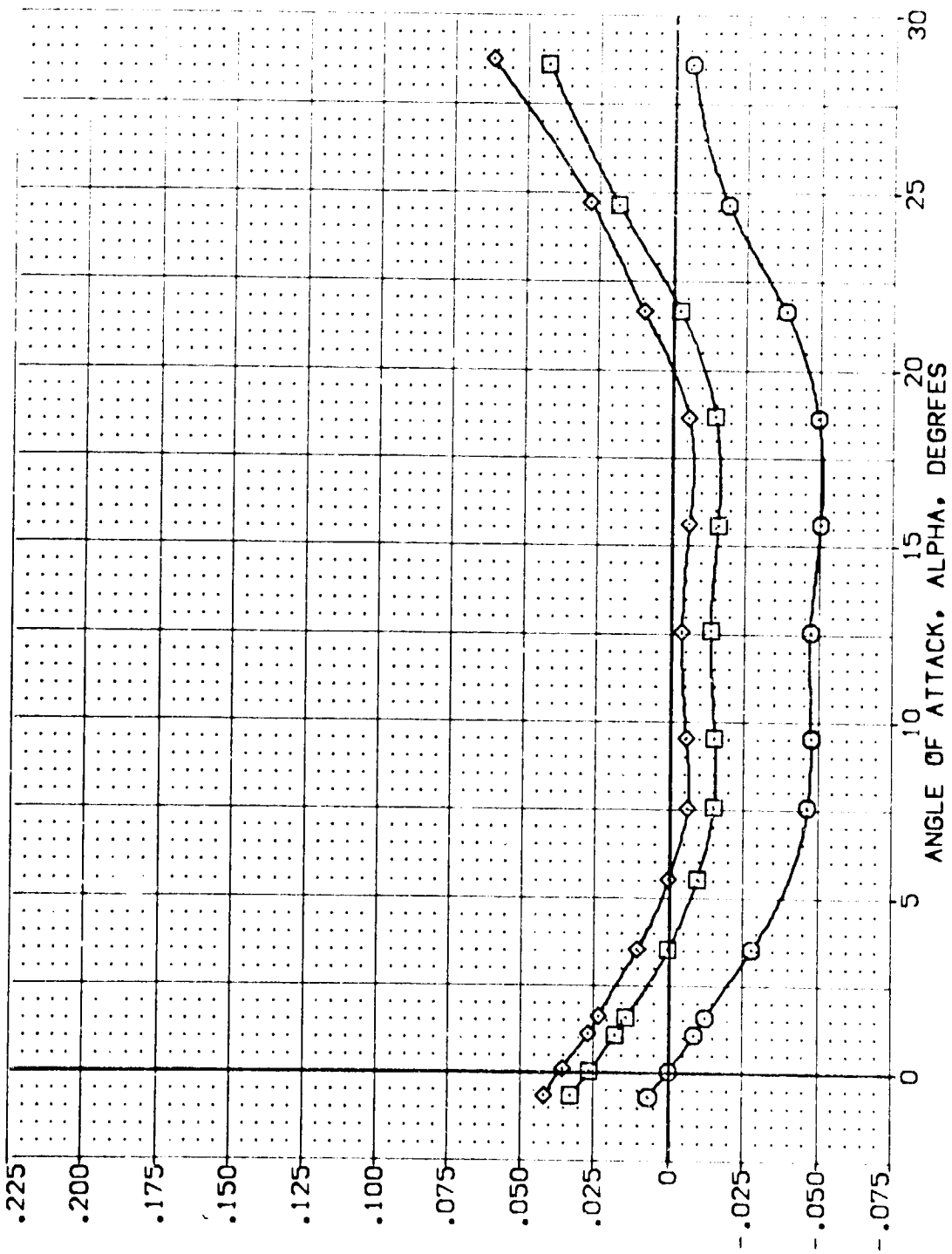


FIG. 8 BODYFLAP EFFECTS

(C)MACH = 1.05

DATA SET SYMBOL    CONFIGURATION DESCRIPTION    ELEVON    AILRON    BDF LAP    SPOBARK    REFERENCE INFORMATION

(TEJ010)	ARC 11-747 OAS3A B C M F VI V	.000	.000	15.300	25.000	SREF 2.4210 SQ.FT.
(TEJ016)	ARC 11-747 OAS3A B C M F VI V	.000	.000	16.000	25.000	LREF 14.2440 IN.
(TEJ011)	ARC 11-747 OAS3A B C M F VI V	.000	.000	-11.700	25.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300



PITCHING MOMENT COEFFICIENT (Cm), CLMAY

FIG. 8 BODYFLAP EFFECTS

(E)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVATION	AILERON	BOFLAP	SPDRBK	REFERENCE INFORMATION
[TEJ010]	ARC 11-747 0A53A B C M F V1 V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
[TEJ016]	ARC 11-747 0A53A B C M F V1 V	.000	.000	.000	25.000	LREF 14.2440 IN.
[TEJ011]	ARC 11-747 0A53A B C M F V1 V	.000	.000	-11.700	25.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

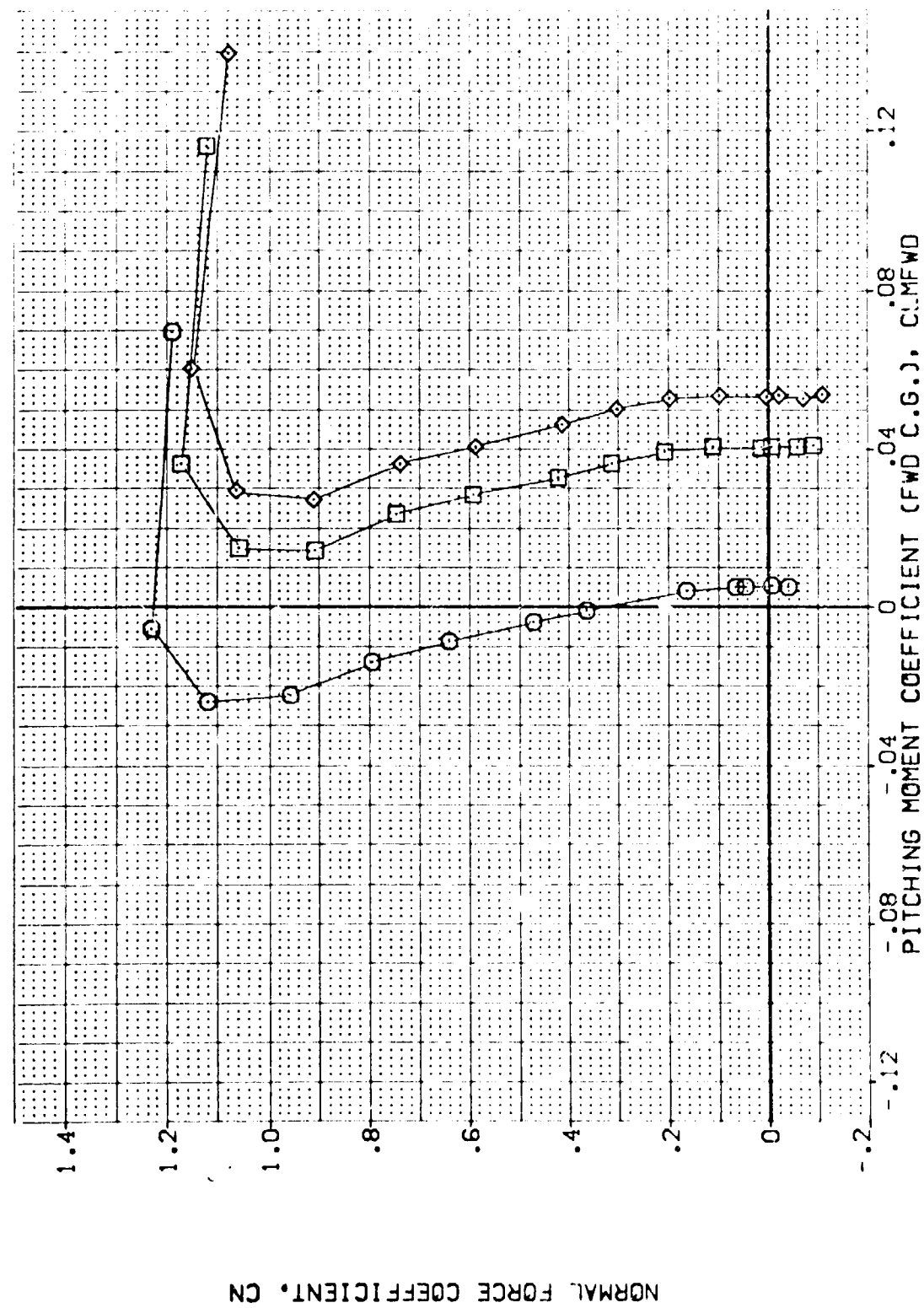


FIG. 8 BODYFLAP EFFECTS

(A)MACH = .60



DATA SET SYMBOL	CONF IGURATION DESCRIPTION	ELEVON	AILERON	B.L.LAP	SPDBRK	REFERENCE INFORMATION
(TEJ010)	ARC 11-747 D453A B C M F V1 V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(TEJ016)	ARC 11-747 D453A B C M F V1 V	.000	.000	.000	25.000	LREF 14.2440
(TEJ011)	ARC 11-747 D453A B C M F V1 V	.000	.000	-11.700	25.000	BREF 28.1004
						XMRP 32.3010
						YMRP .0000
						ZMRP 11.2500
						SCALE .0300

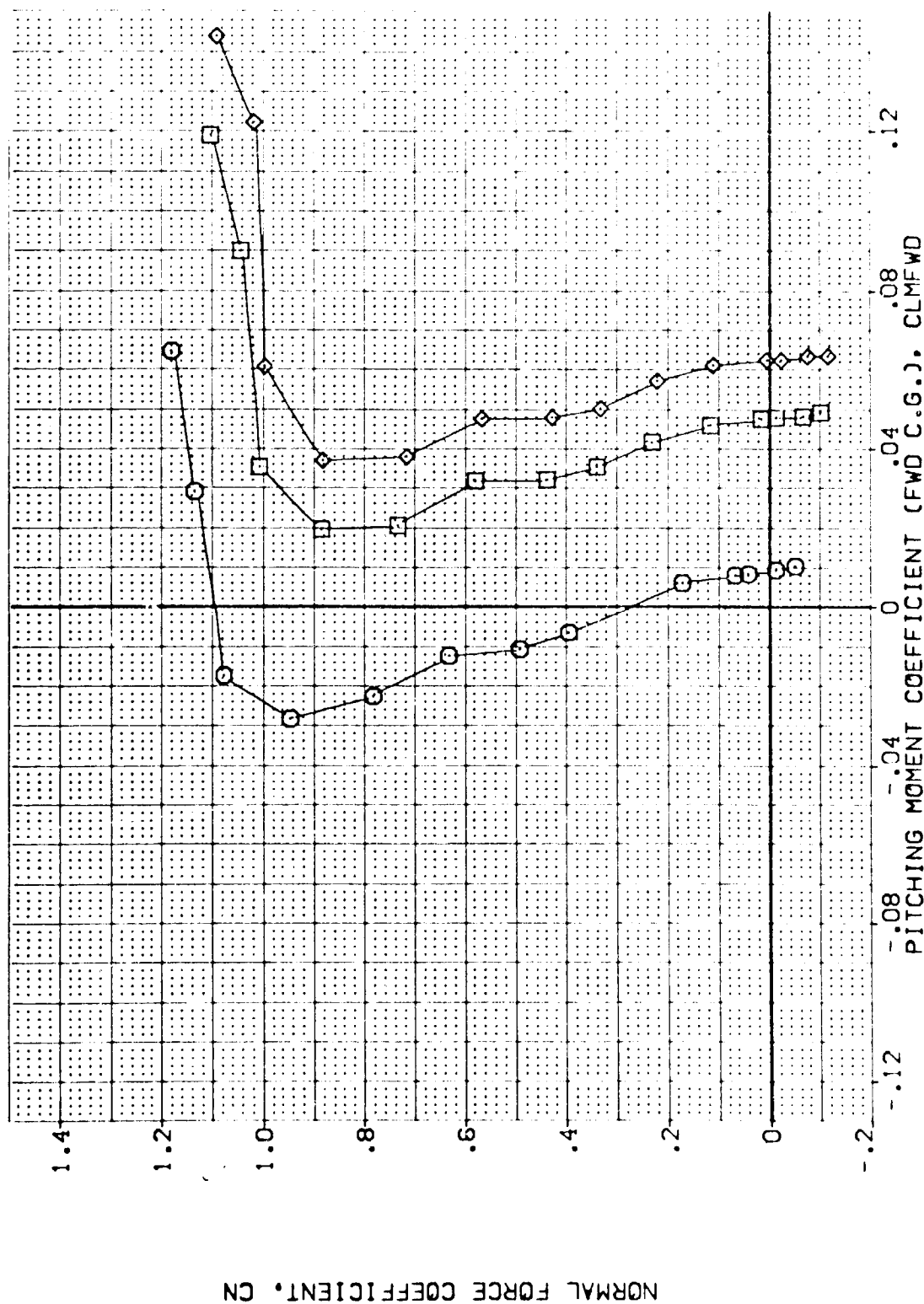


FIG. 8 BODYFLAP EFFECTS

(B)MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPDBRK	REFERENCE INFORMATION
(TEJ010)	ARC 11-747 OAS3A B C H F VI V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(TEJ016)	ARC 11-747 OAS3A B C H F VI V	.000	.000	.000	25.000	LREF 14.2440 IN.
(TEJ011)	ARC 11-747 OAS3A B C H F VI V	.000	.000	-11.700	25.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP 11.0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

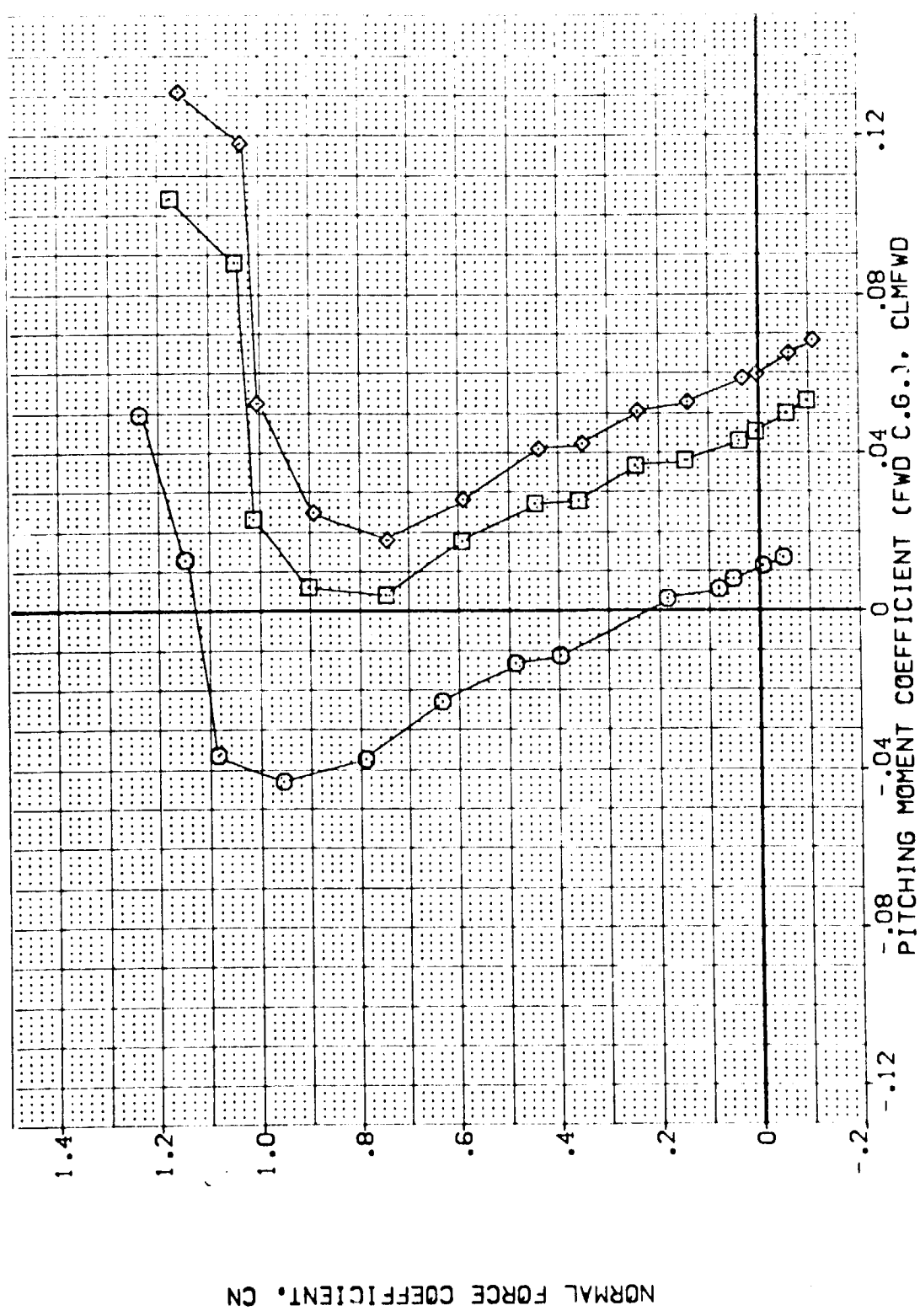


FIG. 8 BODYFLAP EFFECTS

(C)MACH = .90

DATA SET SYMBOL	CONFIGURAT ON DESCRIPTION	ELEVON	AILERON	BODYFLAP	SPDRK	REFERENCE INFORMATION
[TEJ010]	ARC 11-747 DAS3A B C M F VI V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
[TEJ016]	ARC 11-747 DAS3A B C M F VI V	.000	.000	.000	25.000	LREF 14.2440 IN.
[TEJ011]	ARC 11-747 DAS3A B C M F VI V	.000	.000	-11.700	25.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

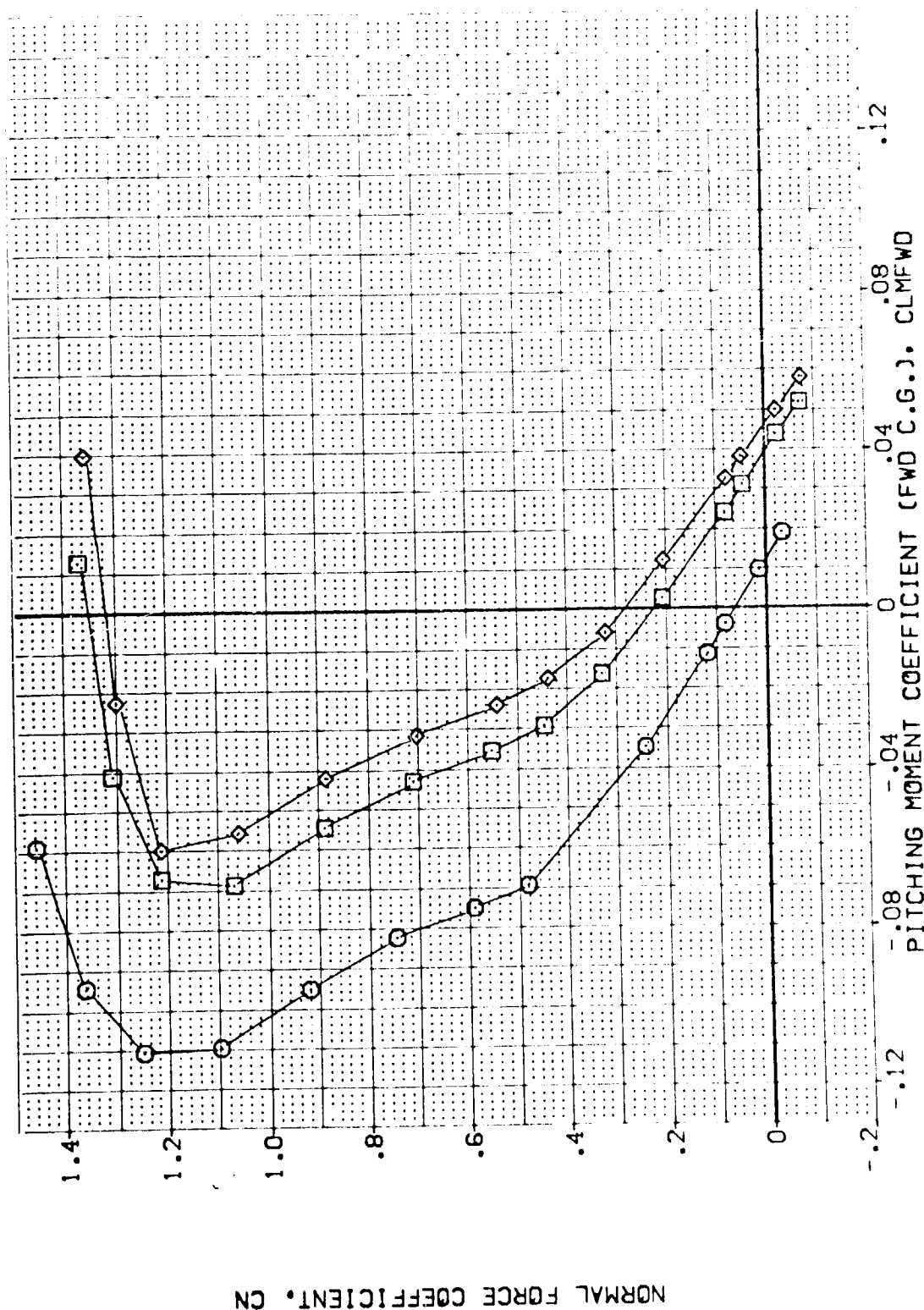


FIG. 8 BODYFLAP EFFECTS

MACH = 1.05

DATA SET SYMBOL

(TEJ010)  
(TEJ016)  
(TEJ011)

CONFIGURATION DESCRIPTION

ARC 11-747 QAS3A B C M F V I V  
ARC 11-747 QAS3A B C M F V I V  
ARC 11-747 QAS3A B C M F V I V

NOM. RV/L  
NOM. RV/L  
NOM. RV/L

ELEVON

.000  
.000  
.000

AILERON

.000  
.000  
.000

BOFLAP

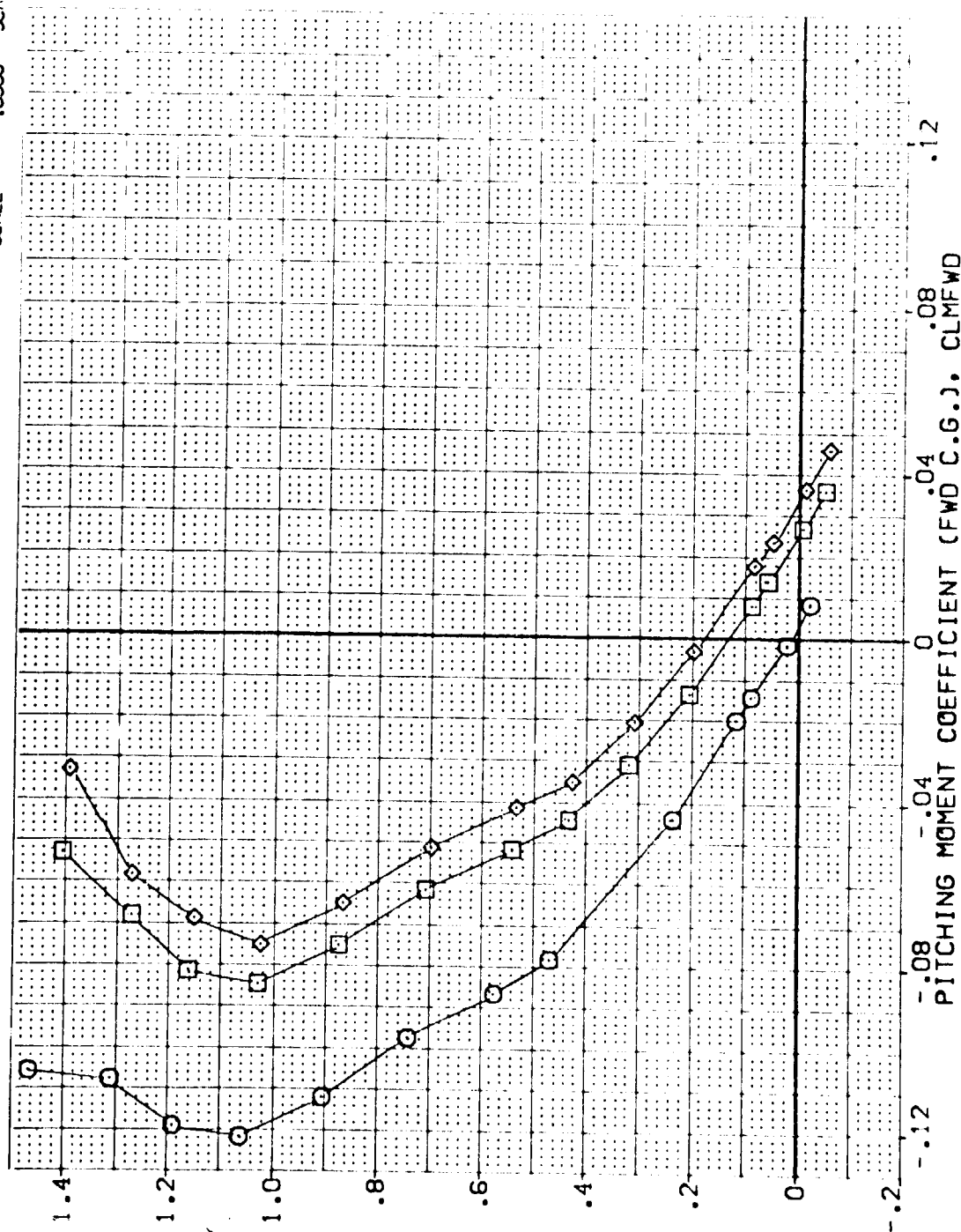
16.300  
.000  
-11.700

SPDBRK

25.000  
25.000  
25.000

REFERENCE INFORMATION

SREF 2.4210 SQ.FT.  
LREF 14.2440 IN.  
BREF 26.1004 IN.  
XMRP 32.9010 IN.  
YMRP .0000 IN.  
ZMRP 11.2500 IN.  
SCALE .0300



NORMAL FORCE COEFFICIENT, CN

FIG. 8 BODYFLAP EFFECTS

(M)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPDRBK	REFERENCE INFORMATION
{TEJ010}	ARC 11-747 QAS3A B C H F V I V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
{TEJ016}	ARC 11-747 QAS3A B C H F V I V	.000	.000	.000	25.000	LREF 14.2440 IN.
{TEJ011}	ARC 11-747 QAS3A B C H F V I V	.000	.000	-11.700	25.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

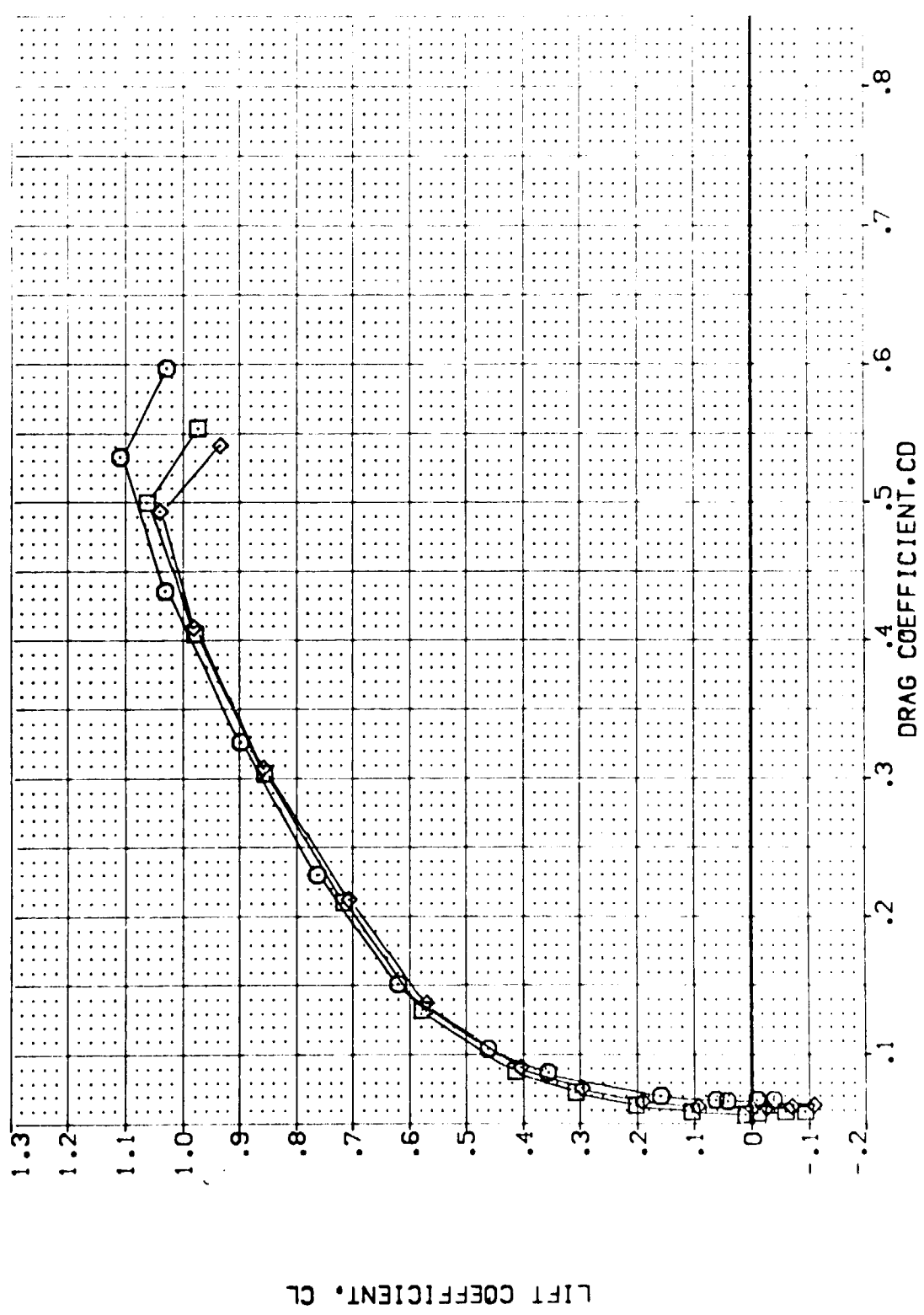


FIG. 8 BODYFLAP EFFECTS

(A)MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BODY FLAP	SPD BRK	REFERENCE INFORMATION
(TEJ010)	ARC 11-747 DA53A B C M F V I V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(TEJ016)	ARC 11-747 DA53A B C M F V I V	.000	.000	.000	25.000	LREF 14.2440 IN.
(TEJ011)	ARC 11-747 DA53A B C M F V I V	.000	.000	-11.700	25.000	BREF 28.1004 IN.
						YMRP 32.3010 IN.
						ZMRP .0000 IN.
						SCALE 11.2500

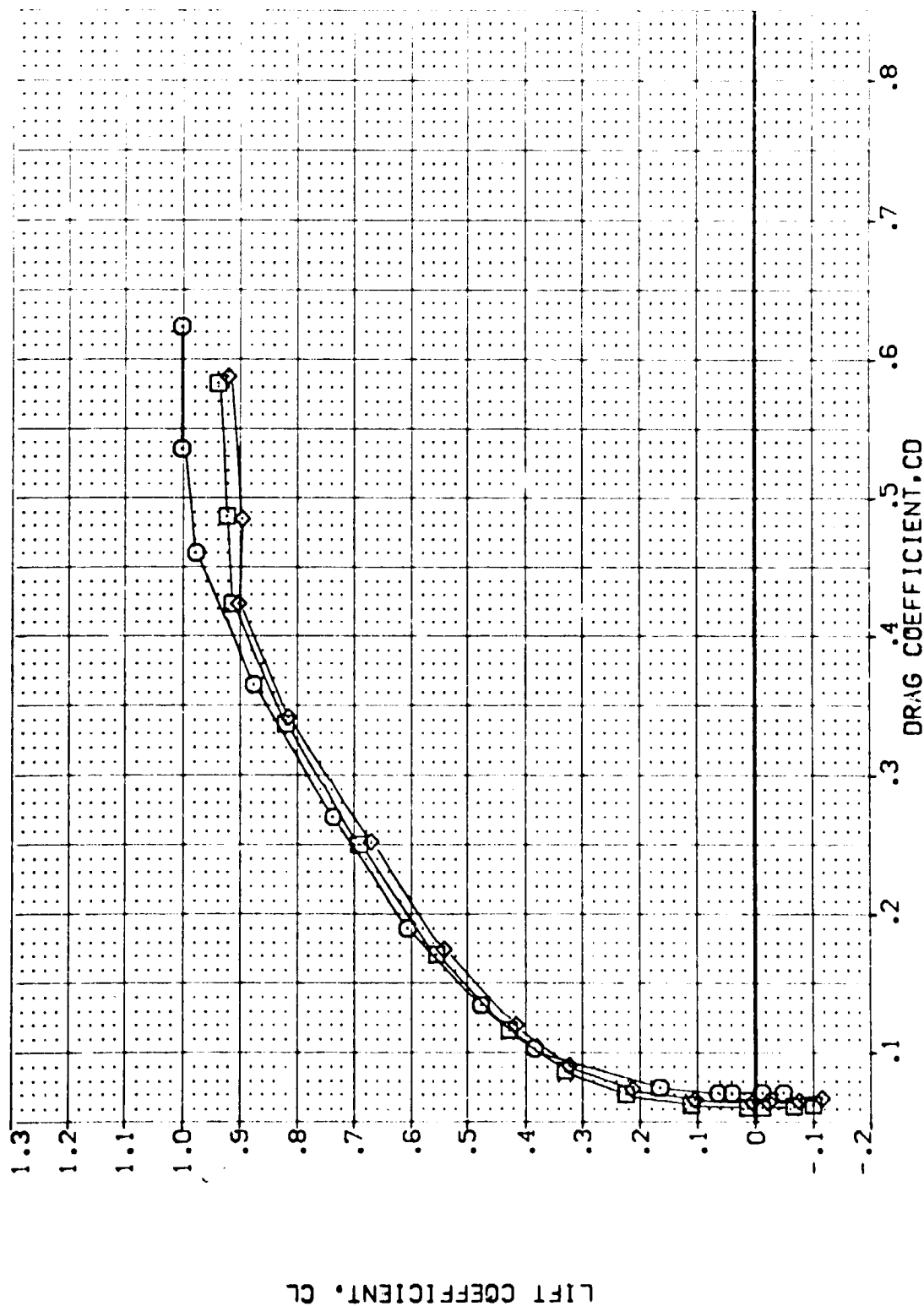


FIG. 8 BODYFLAP EFFECTS

(B)MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BODYFLAP	SPDBRK	REFERENCE INFORMATION
{TEJ010}	ARC 11-747 DA53A B C M F V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
{TEJ016}	ARC 11-747 DA53A B C M F V	.000	.000	.000	25.000	LREF 14.2440 IN.
{TEJ011}	ARC 11-747 DA53A B C M F V	.000	.000	-11.700	25.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.7500 IN.
						SCALE .0300

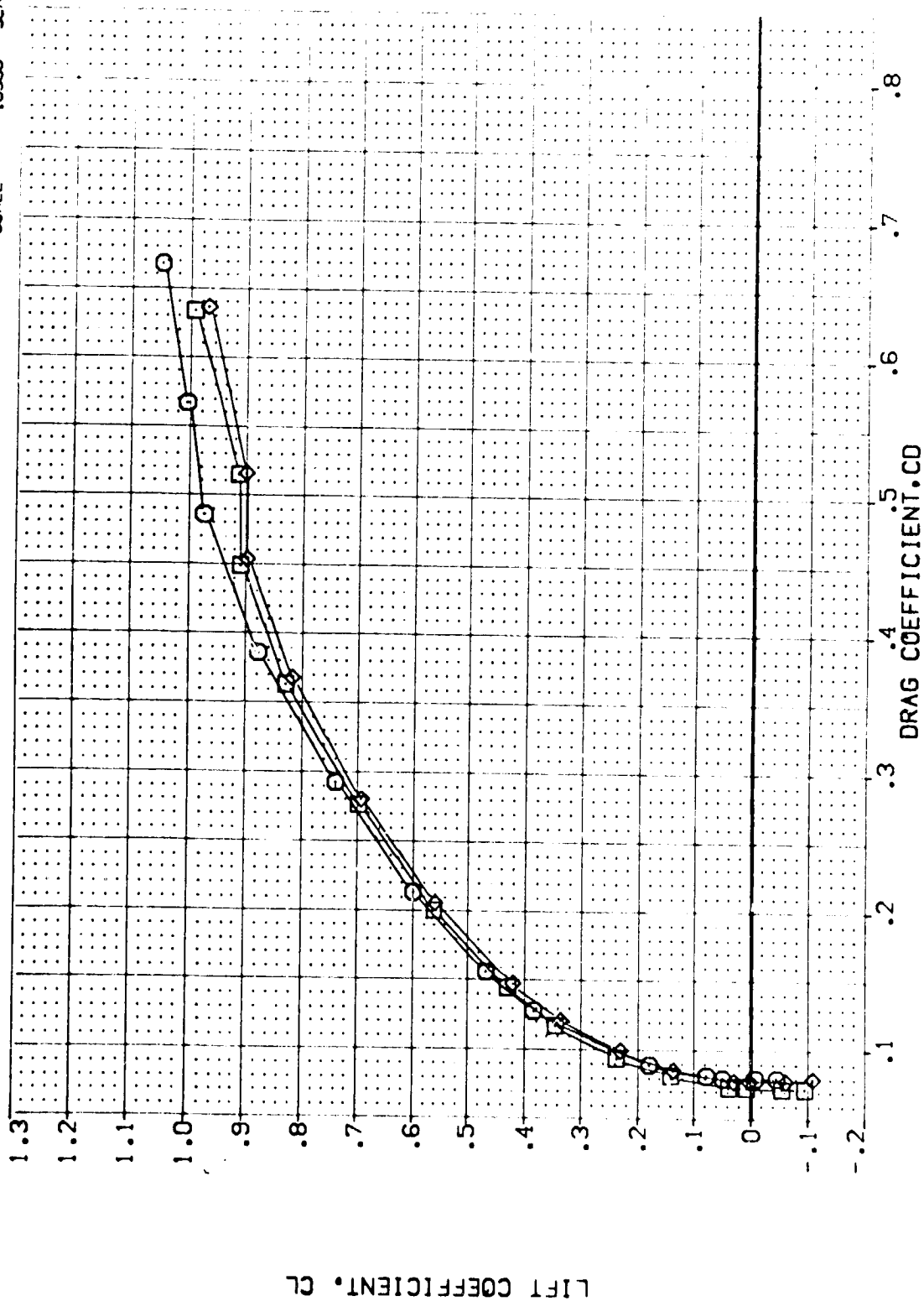


FIG. 8 BODYFLAP EFFECTS

(C)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPDRK	REFERENCE INFORMATION
(TEJ010)	ARC 11-747 BAS3A B C M F V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(TEJ016)	ARC 11-747 BAS3A B C M F V	.000	.000	.000	25.000	LREF 14.2440 IN.
(TEJ011)	ARC 11-747 BAS3A B C M F V	.000	.000	-11.700	25.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

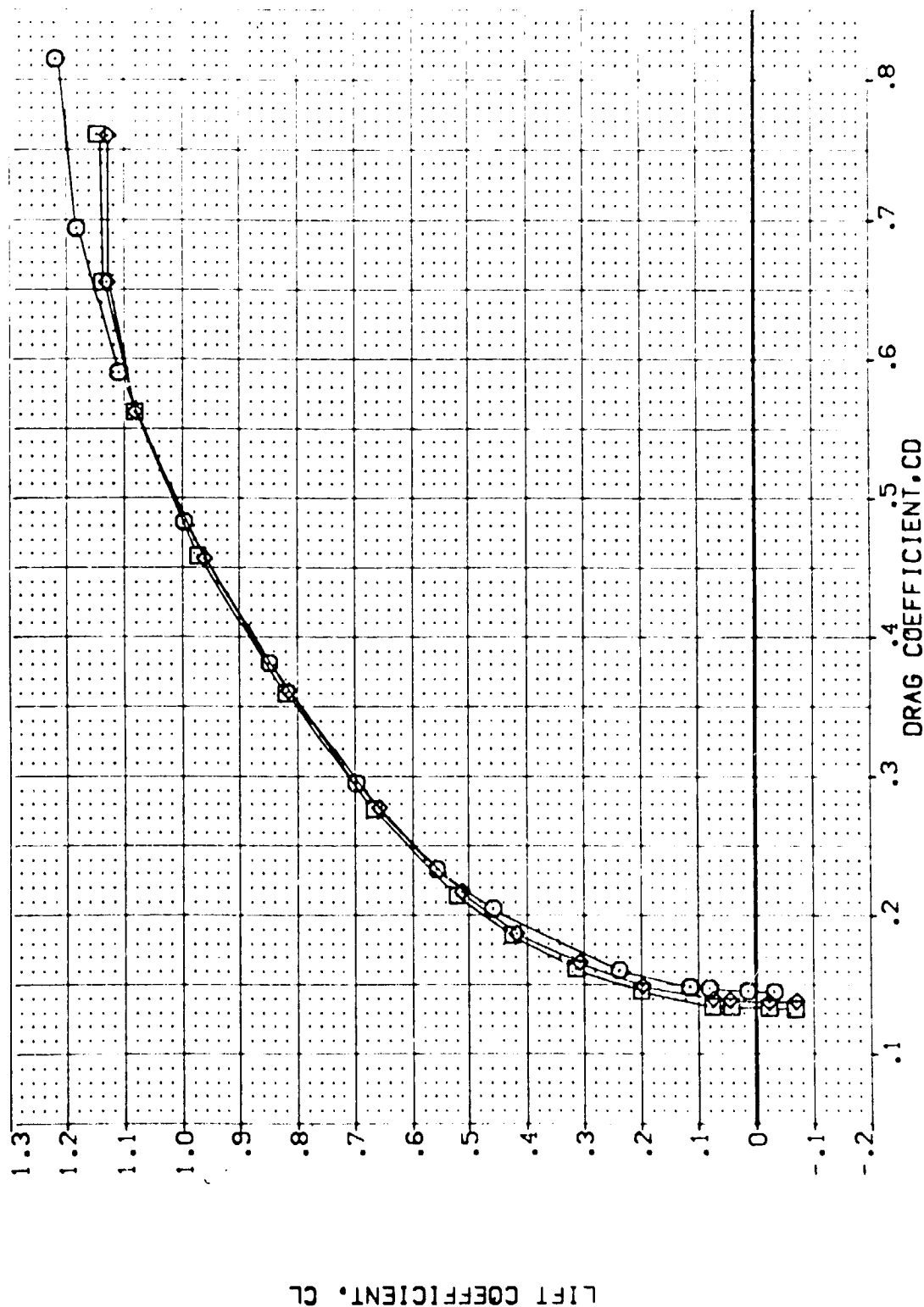


FIG. 8 BODYFLAP EFFECTS

(O)MACH = 1.05





DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BDFLAP	SPDBRK	REFERENCE INFORMATION
(TEJ010)	ARC 11-747 OA53A B C H F VI V	.000	.000	16.300	25.000	SREF 2.4210 50.17.
(TEJ016)	ARC 11-747 OA53A B C H F VI V	.000	.000	.000	25.000	LREF 14.2440 12.
(TEJ011)	ARC 11-747 OA53A B C H F VI V	.000	.000	-11.700	25.000	BREF 28.1004 12.
						XMRP 32.3010 12.
						YMRP .0000 12.
						ZMRP 11.2500 12.
						SCALE .0300 12.

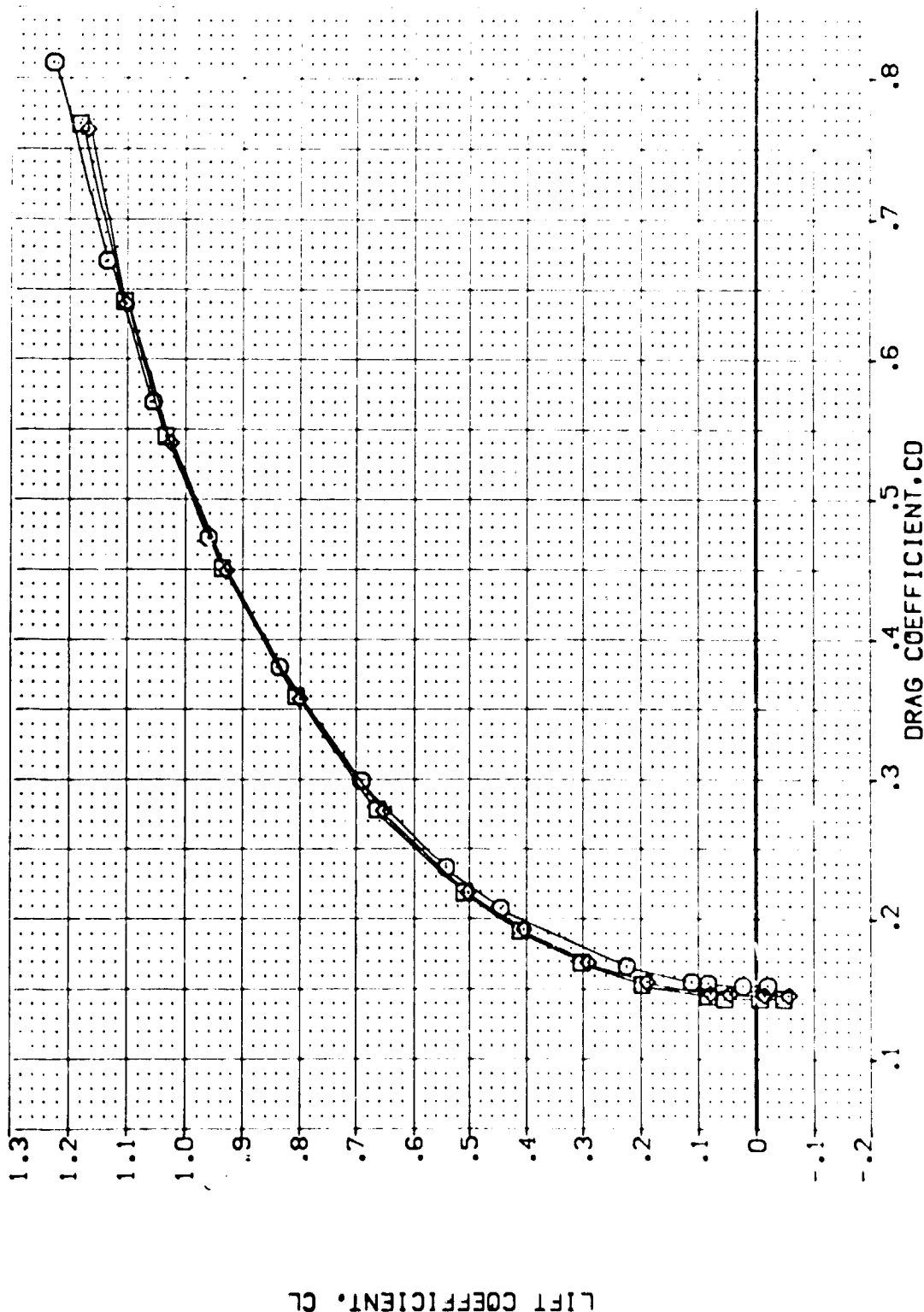


FIG. 8 BODYFLAP EFFECTS

(E)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BUFLAP	SPDBRK	REFERENCE INFORMATION
(TEJ010)	ARC 11-747 OAS3A B C H F V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(TEJ016)	ARC 11-747 OAS3A B C H F V	.000	.000	.000	25.000	LREF 14.2440 IN.
(TEJ011)	ARC 11-747 OAS3A B C H F V	.000	.000	-11.700	25.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

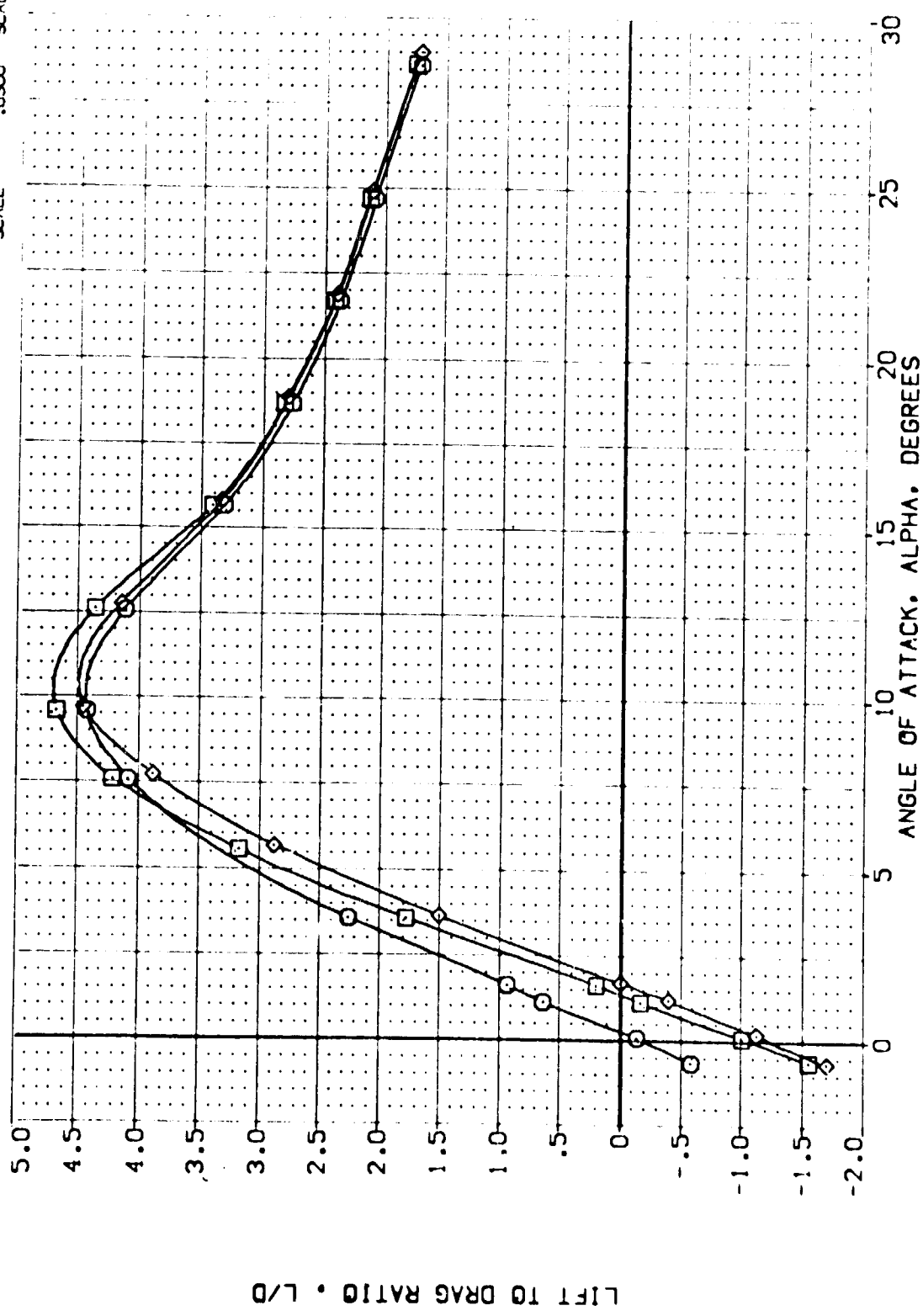


FIG. 8 BODYFLAP EFFECTS

(A)MACH = .60



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPOBRK	REFERENCE INFORMATION
(TEJ010)	ARC 11-747 DA53A B C M F V1 V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(TEJ016)	ARC 11-747 DA53A B C M F V1 V	.100	.000	.000	25.000	LREF 14.2440 IN.
(TEJ011)	ARC 11-747 DA53A B C M F V1 V	.000	.000	-11.700	25.000	BREF 28.1004 IN.
						XREF 32.3010 IN.
						YREF .0000 IN.
						ZREF .0000 IN.
						SCALE 11.2500 SCALE

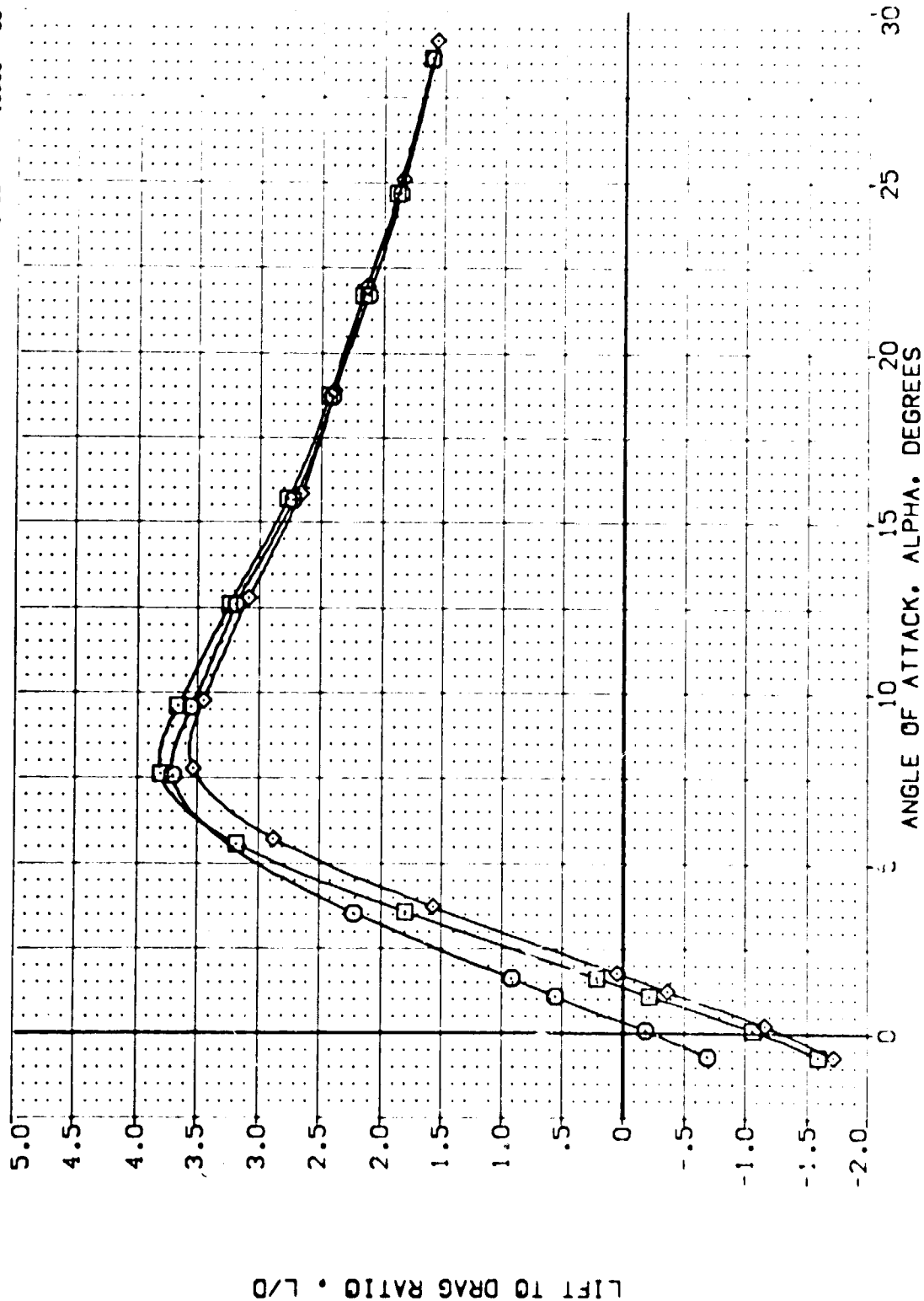


FIG. 8 BODYFLAP EFFECTS

(B)MACH = .80





DATA SET SYMBOL: [TE010] [TE016] [TE011]  
CONFIGURATION DESCRIPTION: ARC 11-747 BA53A B C M F VI V NOM: RVUL  
ARC 11-747 BA53A B C M F VI V NOM: RVUL  
ARC 11-747 BA53A B C M F VI V NOM: RVUL

ELEVON: .000 .000 .000  
AILRON: .000 .000 .000  
BODYFLAP: 16.300 25.000 25.000  
SPDBRK: 25.000 25.000 25.000

REFERENCE INFORMATION:  
SREF: 2.4210 SQ.FT.  
LREF: 14.2440 IN.  
BREF: 28.1004 IN.  
XMRP: 30.10 IN.  
YMRP: .0000 IN.  
ZMRP: 11.2500 IN.  
SCALE: .0300

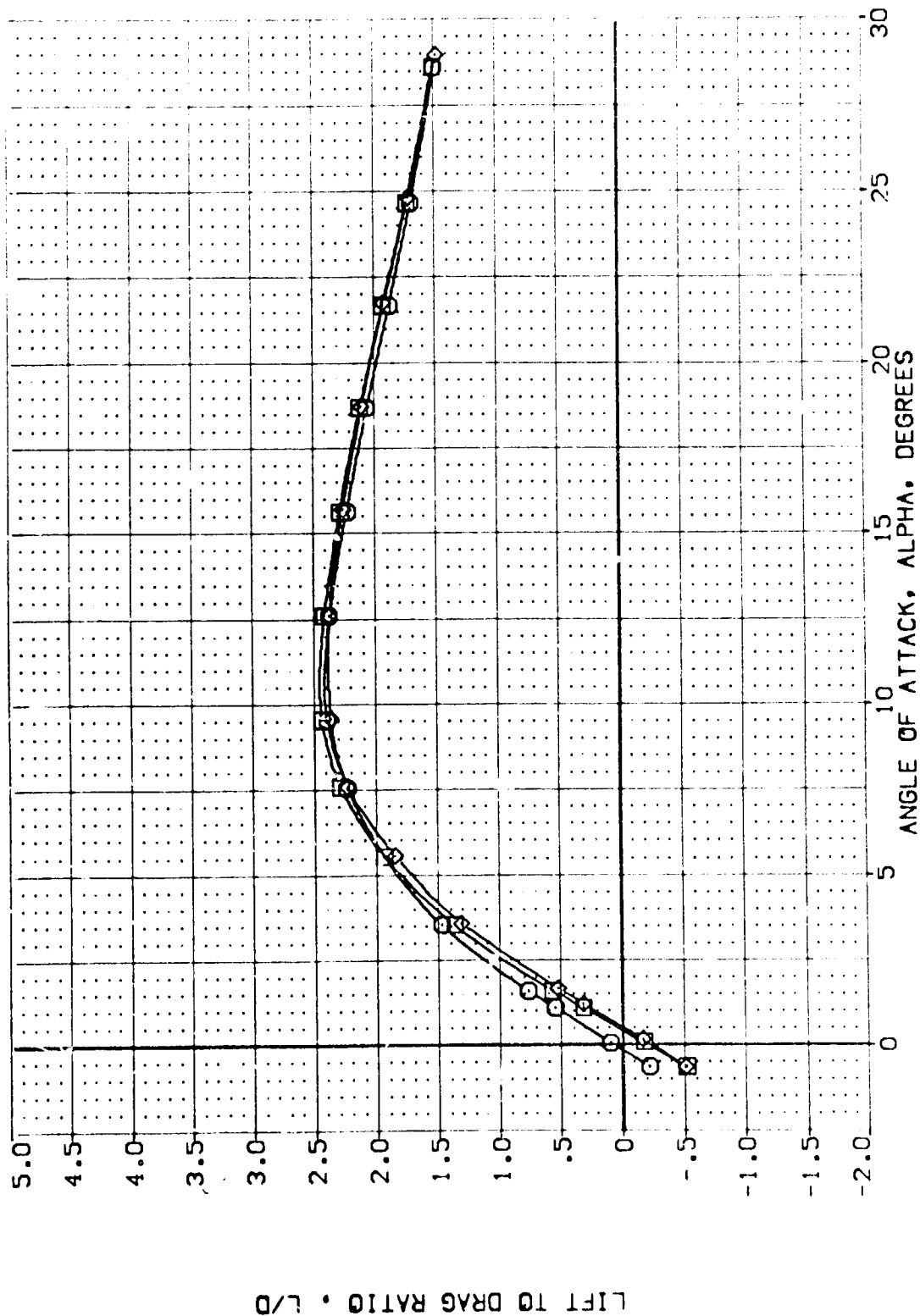


FIG. 8 BODYFLAP EFFECTS

COMACH = 1.05

DATA SET SYMBOL CONFIGURATION DESCRIPTION

[TEJ010]	ARC 11-747	DA53A	B	C	M	F	V	V
[TEJ016]	ARC 11-747	DA53A	B	C	M	F	V	V
[TEJ011]	ARC 11-747	DA53A	B	C	M	F	V	V

ELEVON AILRON BDF LAP SPOBRK

.000	.000	16.300	25.000
.000	.000	.000	25.000
.000	.000	-11.700	25.000

REFERENCE INFORMATION

SREF	2.4210	50. FT.
LREF	14.2440	IN.
BREF	28.1004	IN.
XMRP	32.3010	IN.
YMRP	.0000	IN.
ZMRP	11.2500	IN.
SCALE	.0300	SCALE

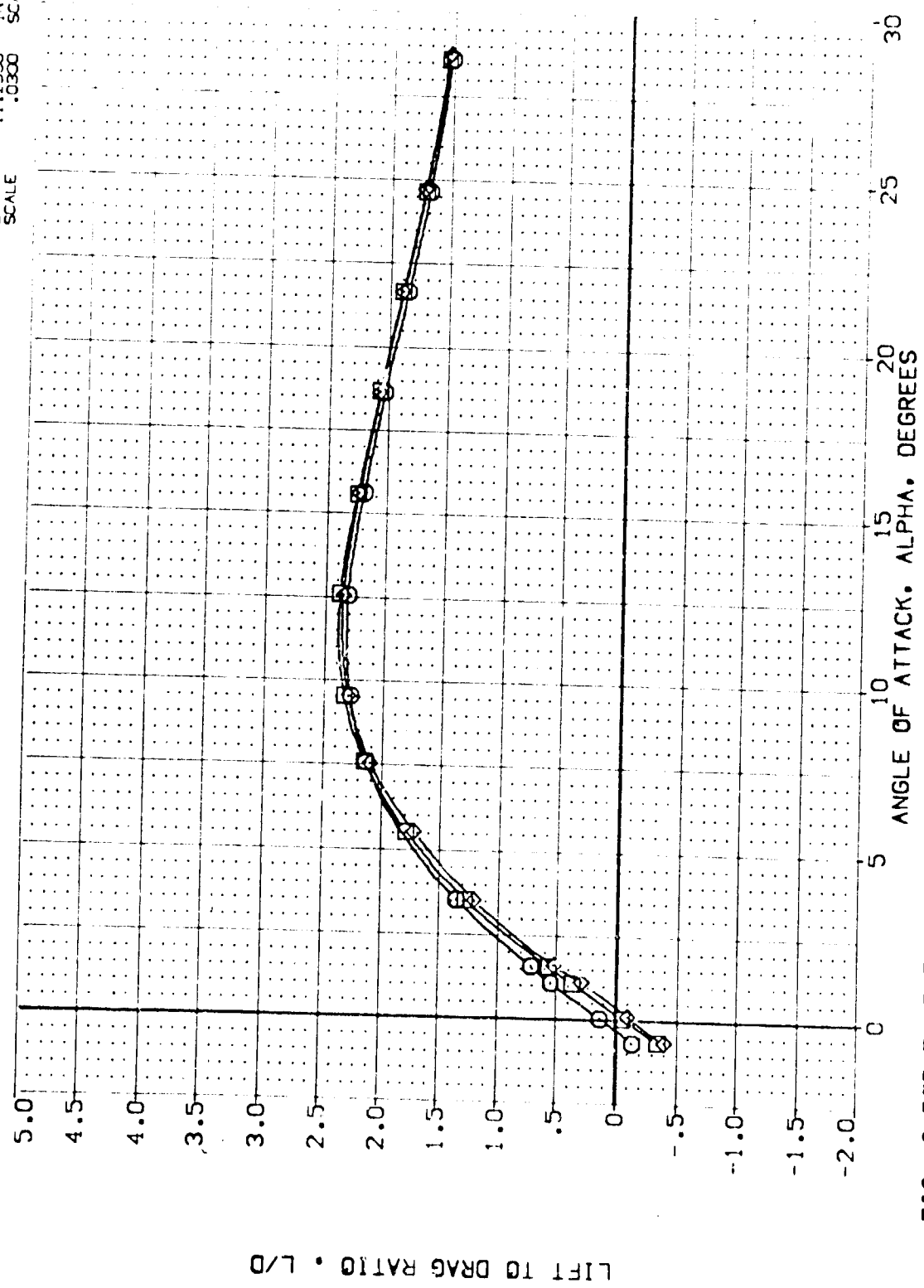


FIG. 8 BODYFLAP EFFECTS

(E)MACH = 1.20

DATA SET SYMBOL CONFIGURATION DESCRIPTION ELEVON AILERON BODYFLAP SPOILER REFERENCE INFORMATION

[AEJ010]	ARC 11-747 CAS3A B C	NON: RN/L	.000	16.300	25.000	SREF	2.4210	SQ.F.T.
[AEJ016]	ARC 11-747 CAS3A B C	NON: RN/L	.000	.000	25.000	LREF	14.2440	
[AEJ011]	ARC 11-747 CAS3A B C	NON: RN/L	.000	-11.700	25.000	BREF	28.1000	
						XMPP	32.0000	
						YMPP	.0000	
						ZMPP	11.2500	
						SCALE	.0300	SCALE

LONGITUDINAL CENTER OF PRESSURE/BODY LENGTH, XCP/L

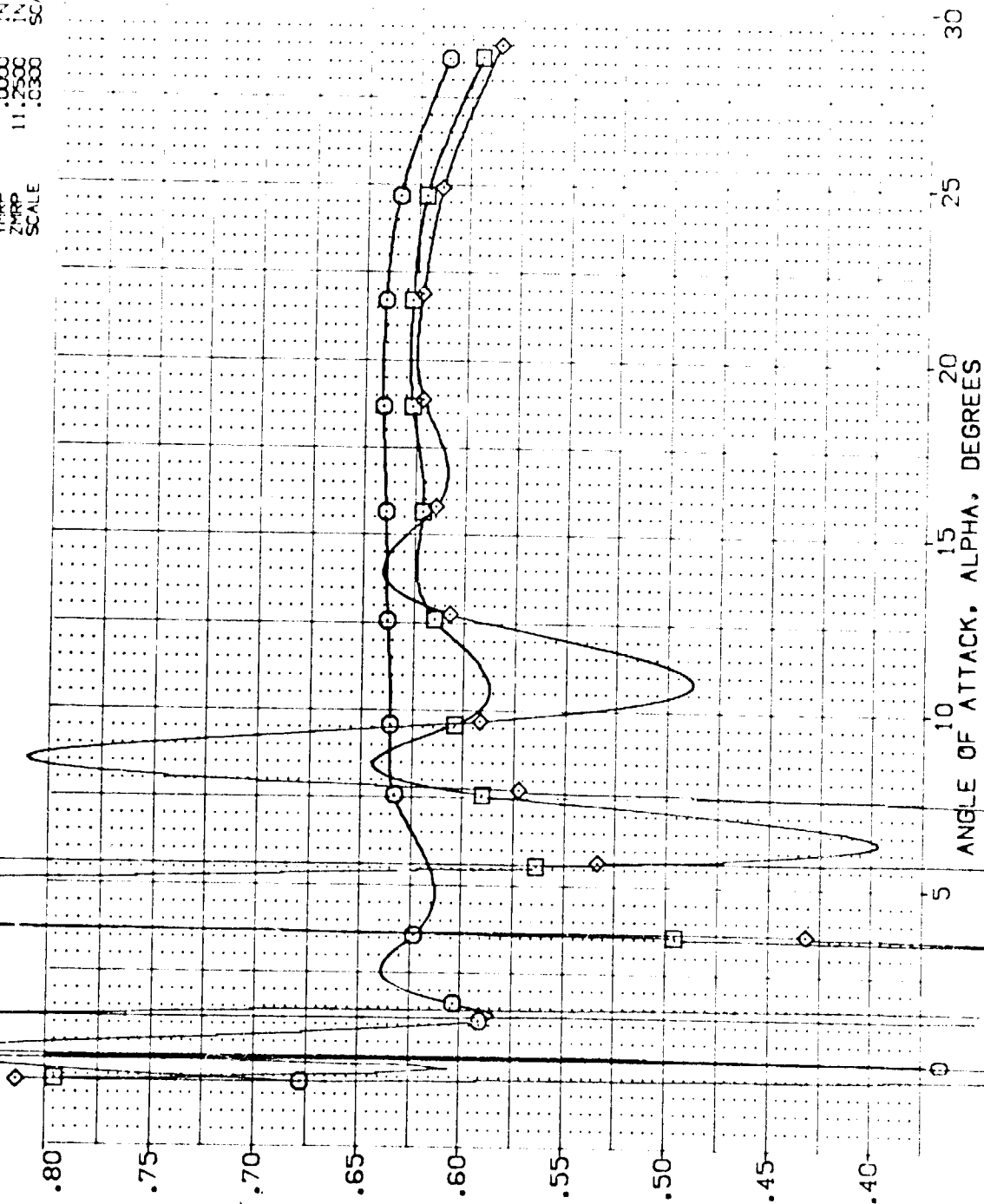


FIG. 8 BODYFLAP EFFECTS

(A)MACH = .60

DATA SET SYMBOL    CONV.    ILLUSTRATION DESCRIPTION    ELEVON    AILERON    BOFLAP    SPDRK    REFERENCE INFORMATION

(AEJ010)	ARC 11-747	QAS3A B C	M F	M	V	NDH: RV/L	.000	.000	16.300	25.000	SPREF	2.4210	50. FT.
(AEJ016)	ARC 11-747	QAS3A B C	M F	M	V	NDH: RV/L	.000	.000	.000	25.000	LMREF	14.2440	IN.
(AEJ011)	ARC 11-747	QAS3A B C	M F	M	V	NDH: RV/L	.000	.000	-11.700	25.000	BRREF	28.1004	IN.
											XMRP	32.3010	IN.
											YMRP	.0000	IN.
											ZMRP	11.2530	IN.
											SCALE	.0300	SCALE

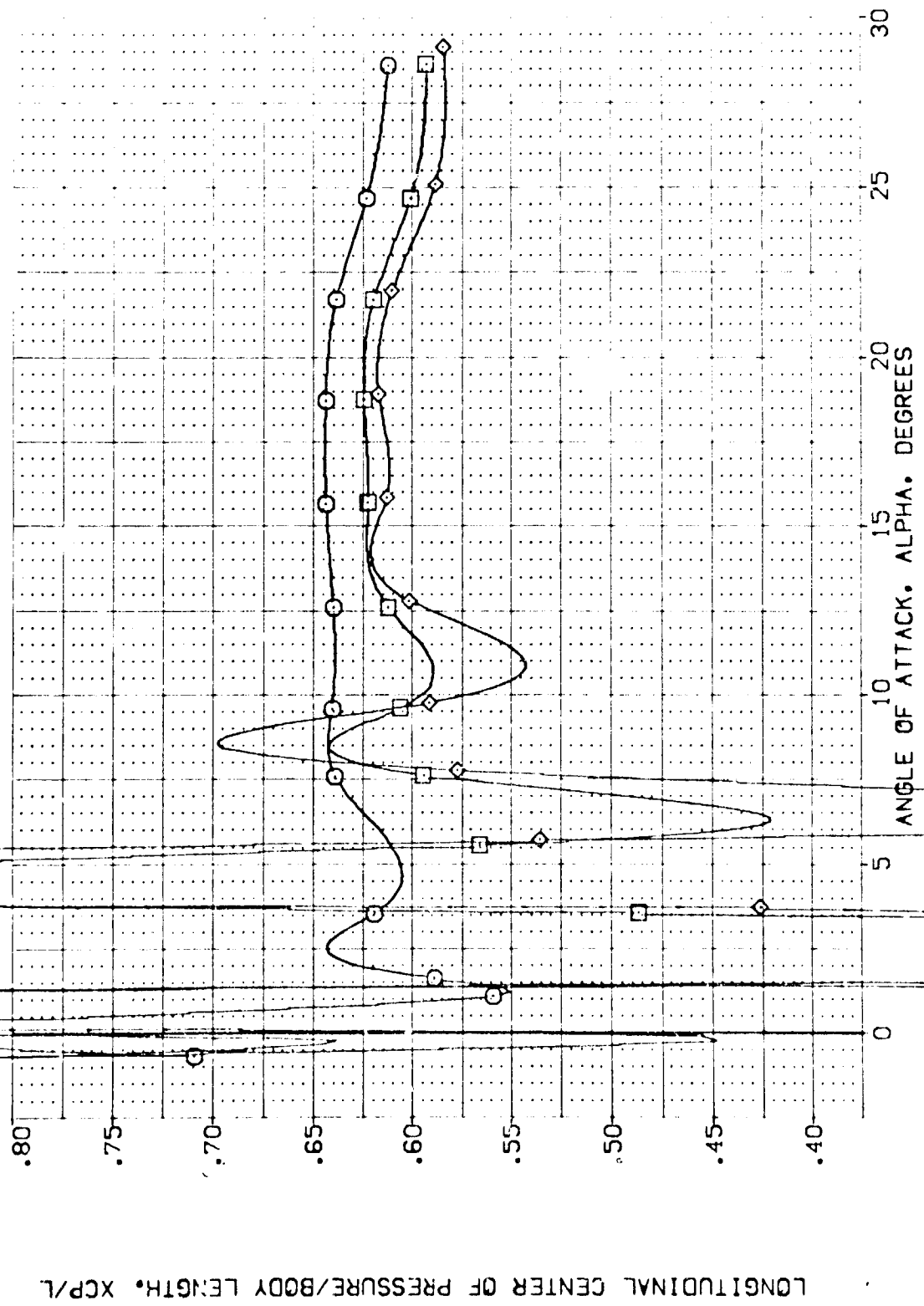
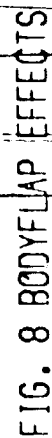


FIG. 8 BODYFLAP EFFECTS

(B)MACH = .80





(C)MACH = .90



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPDBRK	REFERENCE INFORMATION
[AEJ010]	ARC 11-747 DA53A B C H F V1 V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
[AEJ016]	ARC 11-747 DA53A B C H F V1 V	.000	.000	.000	25.000	LREF 14.2440 IN.
[AEJ011]	ARC 11-747 DA53A B C H F V1 V	.000	.000	-11.700	25.000	BREF 28.1004 IN.
						YMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

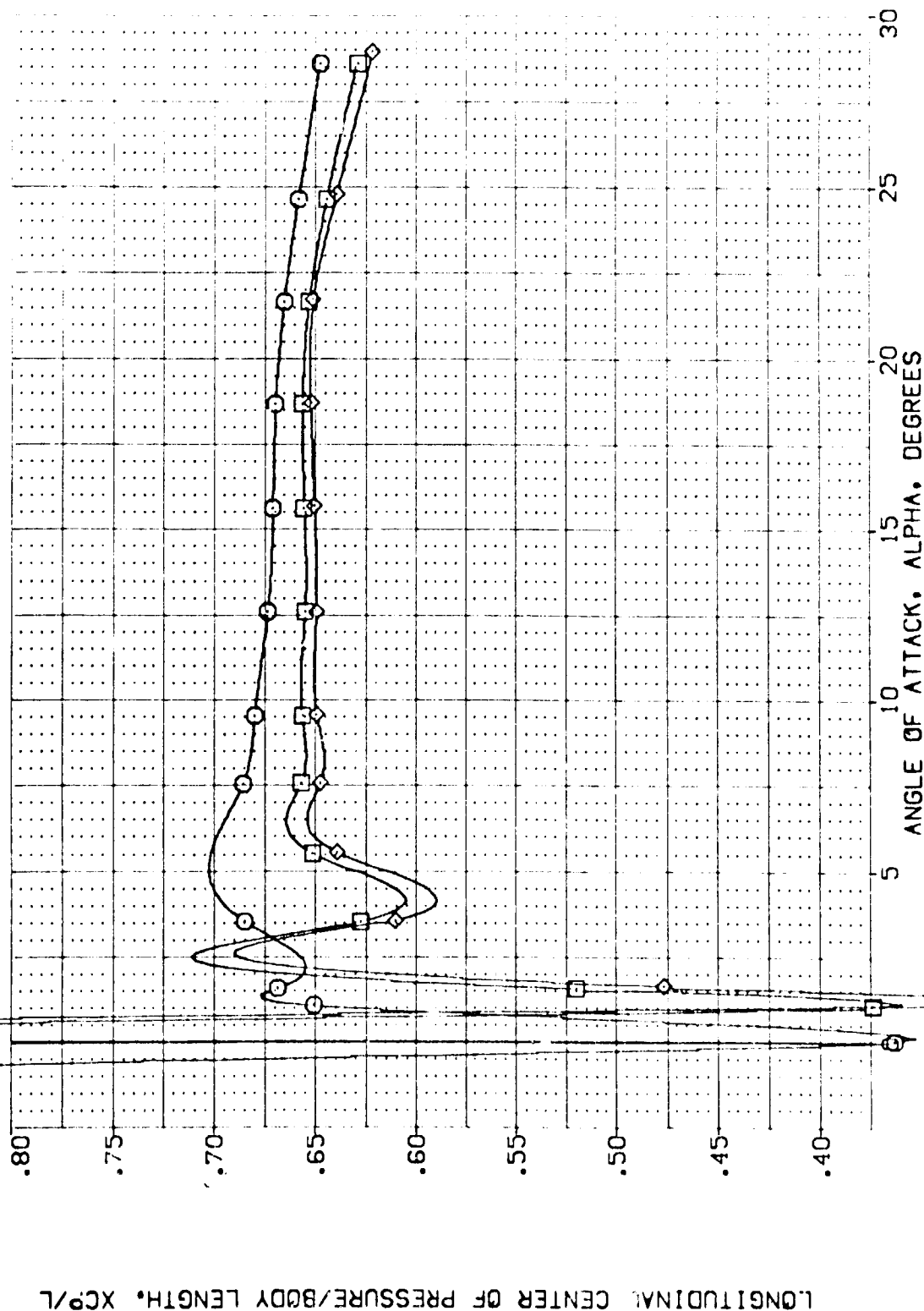


FIG. 8 BODYFLAP EFFECTS

(CD)MACH = 1.05



DATA SET SYMBOL

[AEJ010]  
[AEJ016]  
[AEJ011]

CONFIGURATION DESCRIPTION

ARC 11-747 DAS3A B C M F VI V  
ARC 11-747 DAS3A B C M F VI V  
ARC 11-747 DAS3A B C M F VI V

ELEVON

.000  
.000  
.000

AILERON

.000  
.000  
.000

BOFLAP

16.300  
.000  
-11.700

SPDBRK

25.000  
25.000  
25.000

REFERENCE INFORMATION

SREF 2.4210 SQ.FT.  
LREF 14.2440 IN.  
BREF 28.1004 IN.  
XMRP 32.3010 IN.  
YMRP .0000 IN.  
ZMRP 11.2500 IN.  
SCALE .0300

LONGITUDINAL CENTER OF PRESSURE/BODY LENGTH, XCP/L

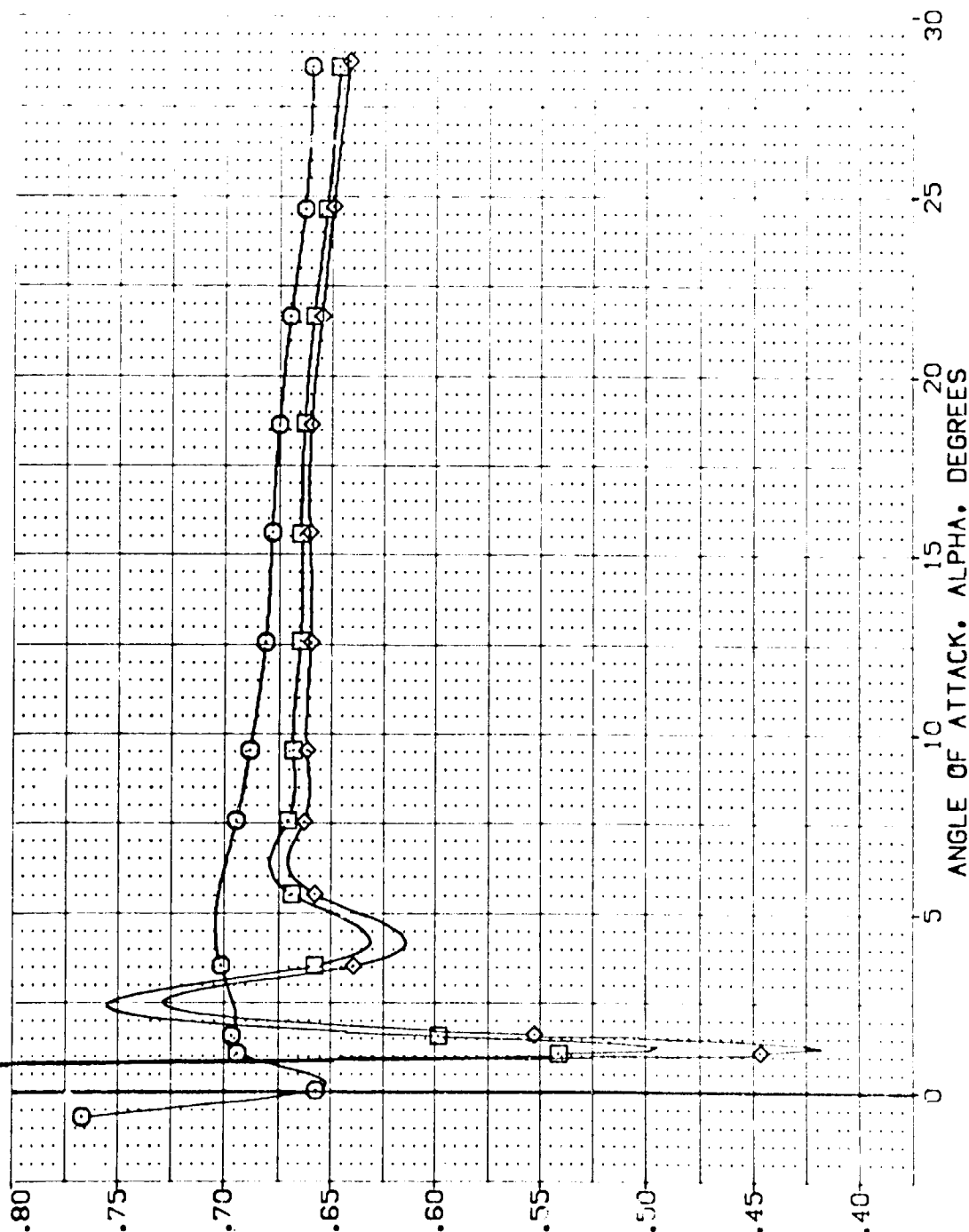


FIG. 8 BODYFLAP EFFECTS

(E)MACH = 1.20



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	DBF	SPDBRK	REFERENCE INFORMATION
{VEJ010}	ARC 11-747 OAS3A B C H F VI V	.000	.000	16.300	25.000	SREF 2.4210 SQ. FT.
{VEJ011}	ARC 11-747 OAS3A B C H F VI V	.000	.000	-11.700	25.000	LREF 14.2440 IN.
						BREF 28.1004 IN.
						XMRRP 32.3010 IN.
						YMRRP .0000 IN.
						ZMRRP 11.2500 IN.
						SCALE .0300

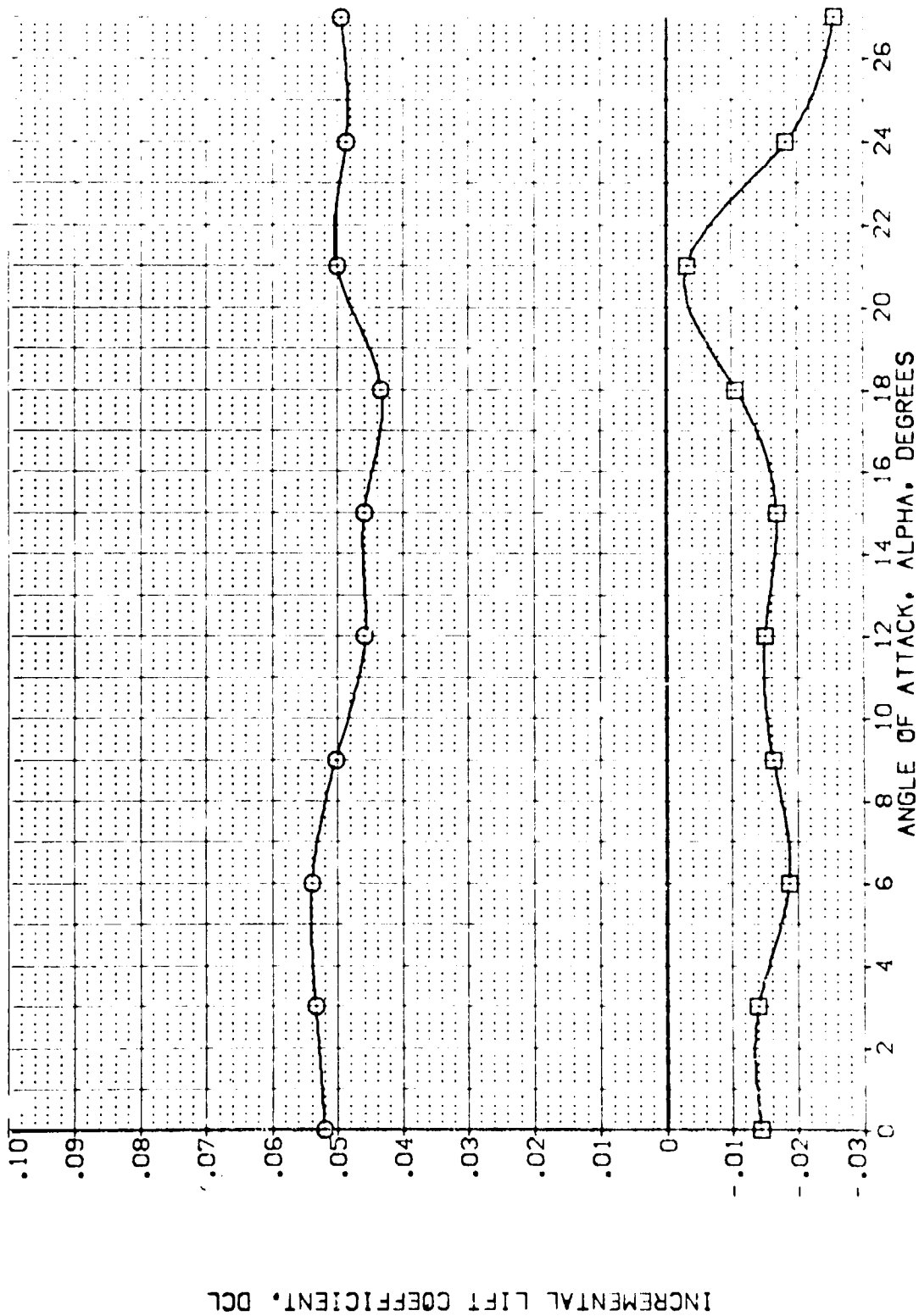


FIG. 8 BODYFLAP EFFECTS

(A)MACH = .60



DATA SET SYMBOL: (VEJ010) (VEJ011) ☐ ☐

CONFIGURATION DESCRIPTION: ARC 11-747 QAS3A B C M F VI V NOM. RV/L

ELEVON: .000 .000 AILRON: .000 .000 DBF: 16.300 -11.700 SPOBRK: 25.000 25.000

REFERENCE INFORMATION: SREF: 2.4210 SQ.FT. LREF: 14.2440 IN. BREF: 28.1004 IN. XMRP: 32.3010 IN. YMRP: .0000 IN. ZMRP: 11.2500 IN. SCALE: .0300

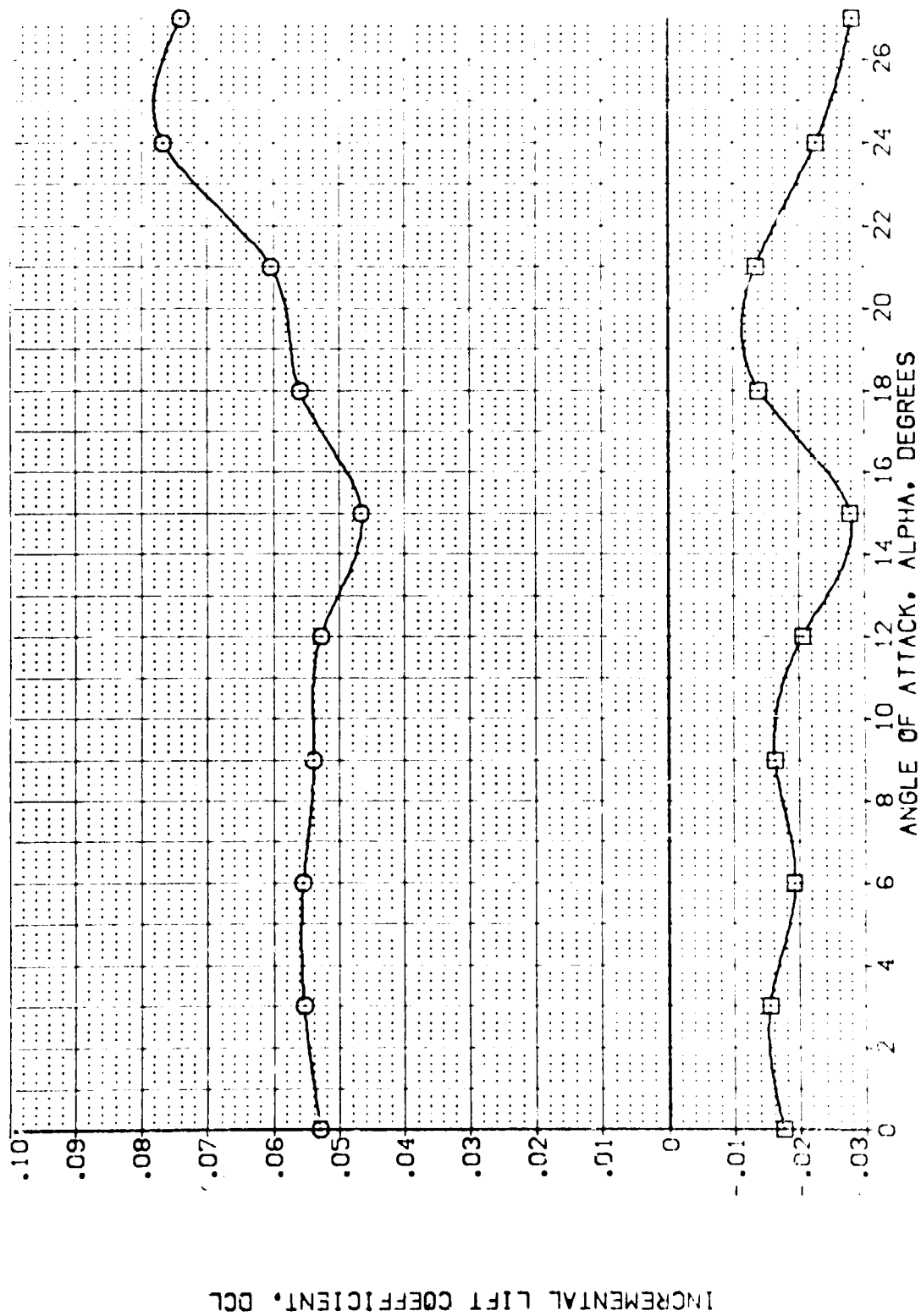


FIG. 8 BODYFLAP EFFECTS

(B) MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	DBF	SPDRBK	REFERENCE INFORMATION
(VEJ010)	ARC 11-747 OAS3A B C H F VI V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(VEJ011)	ARC 11-747 OAS3A B C H F VI V	.000	.000	-11.700	25.000	LREF 14.2440
						BREF 28.1004
						XMRP 32.3010
						ZMRP .0000
						SCALE 11.2500
						SCALE .0300

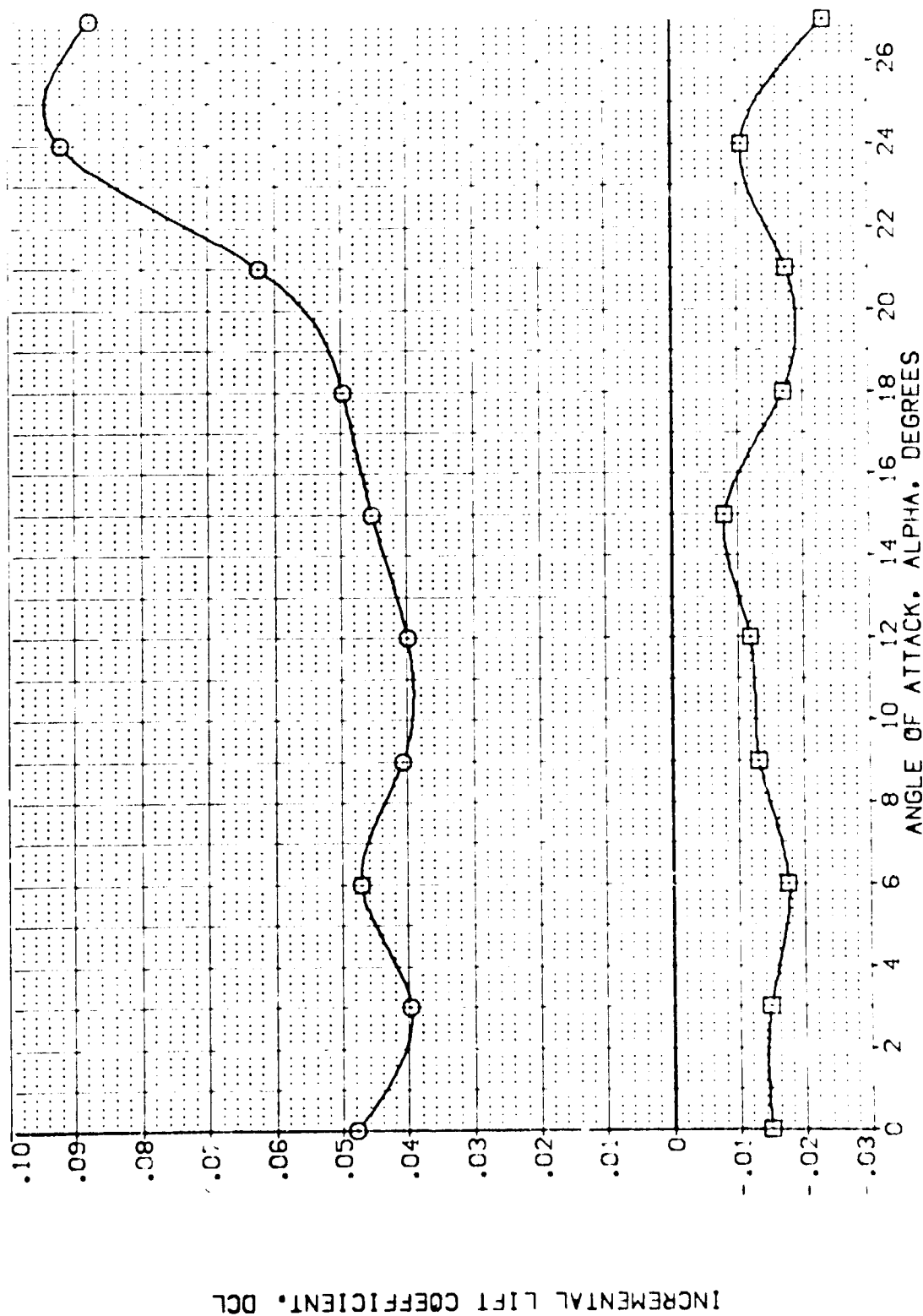


FIG. 8 BODYFLAP EFFECTS

(C)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	DBF	SPDBRK	REFERENCE INFORMATION
[VEJ010]	ARC 11-747 DAS3A B C M F V1 V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
[VEJ011]	ARC 11-747 DAS3A B C M F V1 V	.000	.000	-11.700	25.000	LREF 14.2440 IN.
						BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP 11.0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

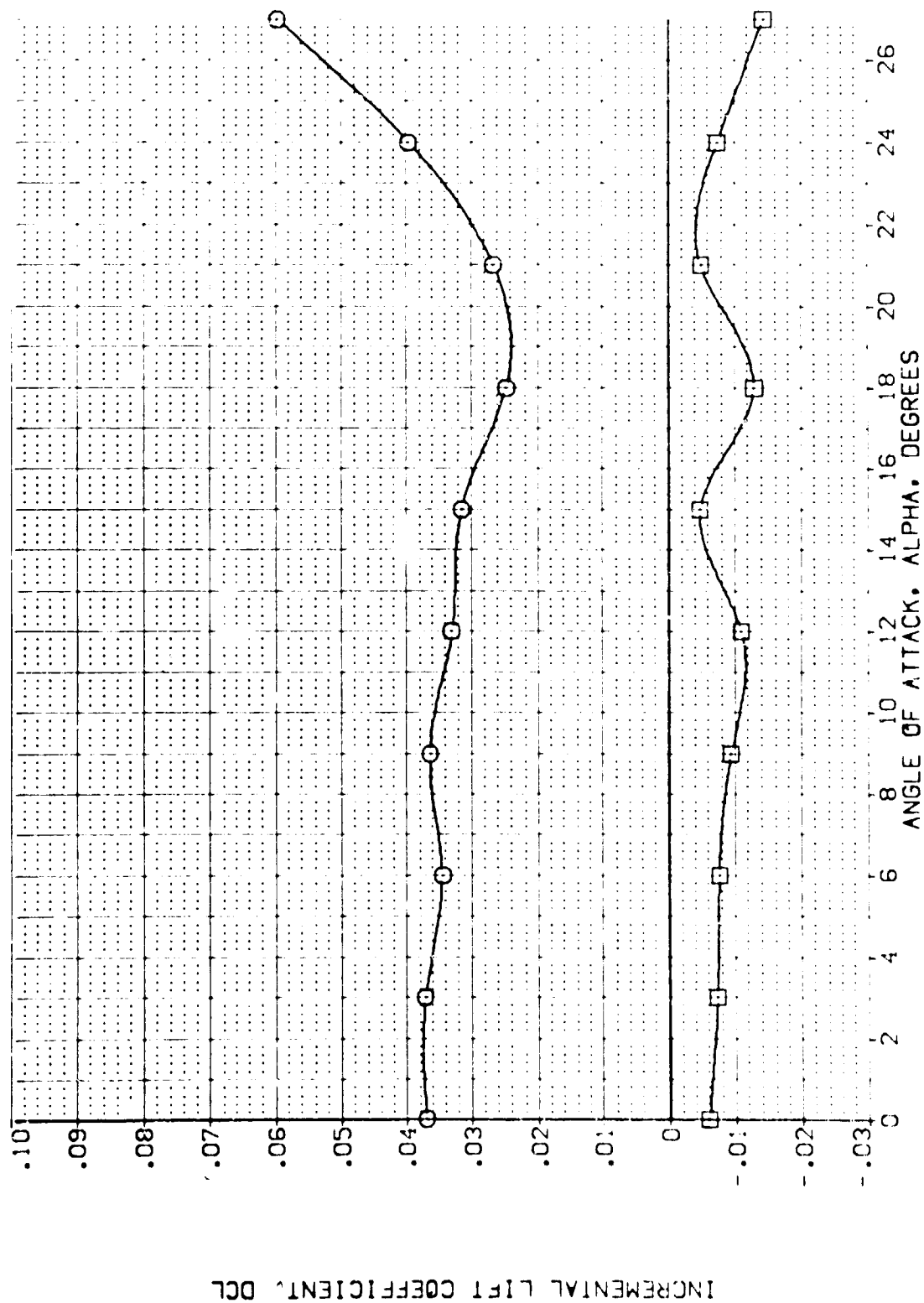


FIG. 8 BODYFLAP EFFECTS

COMACH = 1.05

DATA SET SYMBOL CONFIGURATION DESCRIPTION

ARC 11-747	ARC 11-747	QAS3A	B	C	M	F	V	V	ELEVATION	AIRLON	DEF	SPDRBK	REFERENCE INFORMATION
(VE2010)									.000	.000	16.300	25.000	SREF 2.4210 50.0 FT.
(VE2011)									.000	.000	-11.700	25.000	LREF 14.2140 IN.
													BREF 28.1004 IN.
													XMRP 32.3010 IN.
													YMRP .0000 IN.
													ZMRP 11.2500 IN.
													SCALE .0300

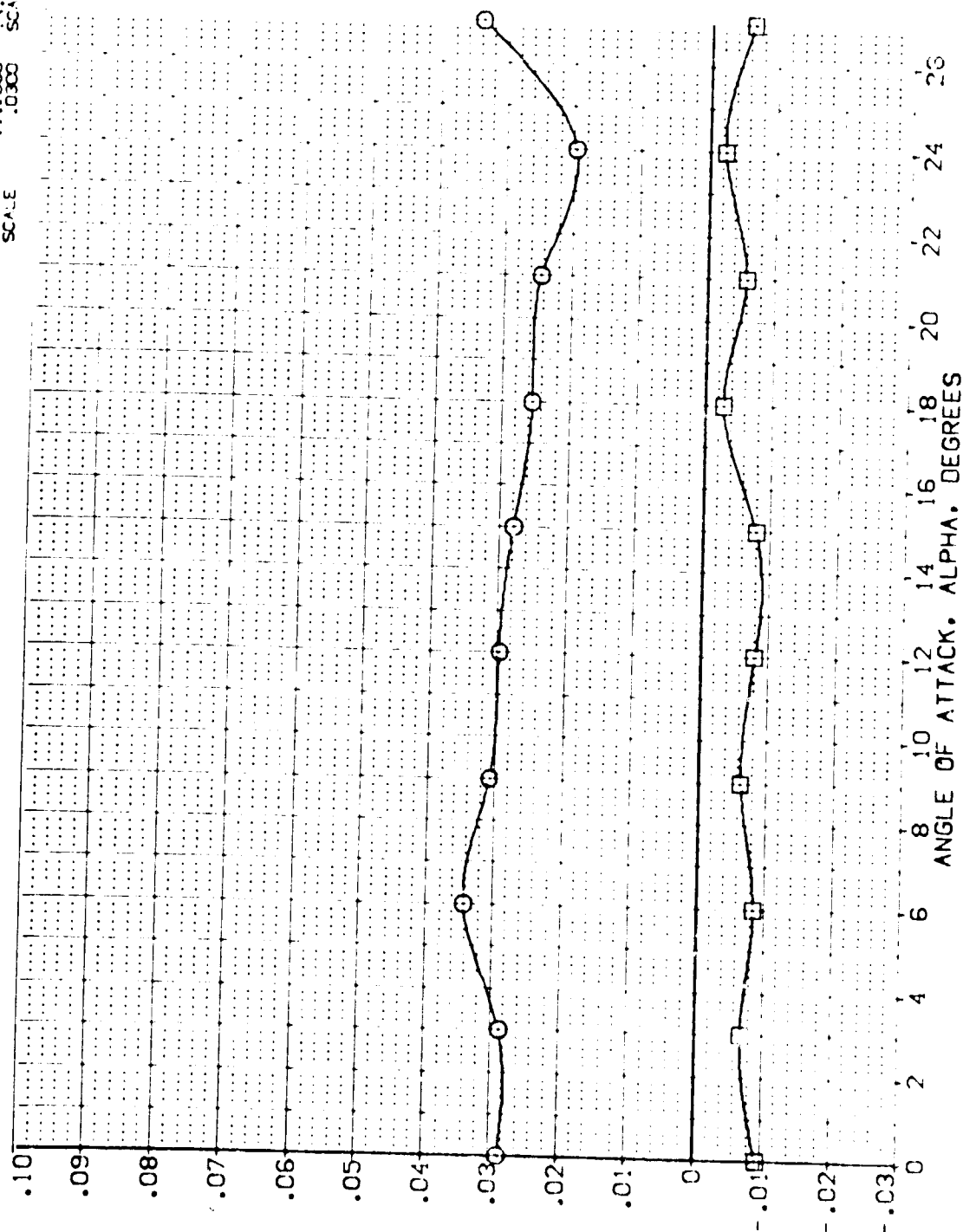


FIG. 8 BODYFLAP EFFECTS

(C)MACH = 1.20



DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 (VEJ010) [ ] ARC 11-747 DAS3A B C M F V V NOM: RVUL  
 (VEJ011) [ ] ARC 11-747 DAS3A B C M F V V NOM: RVUL

ELEVON AIRRON DBF SPOBRK  
 .000 .000 16.300 25.000  
 .000 .000 -11.700 25.000

REFERENCE INFORMATION  
 SREF 2.4210 SQ.FT.  
 LREF 14.2440  
 BREF 28.1004  
 XMRP 32.3010  
 YMRP 30.000  
 ZMRP 11.2500  
 SCALE .0300 SCALE

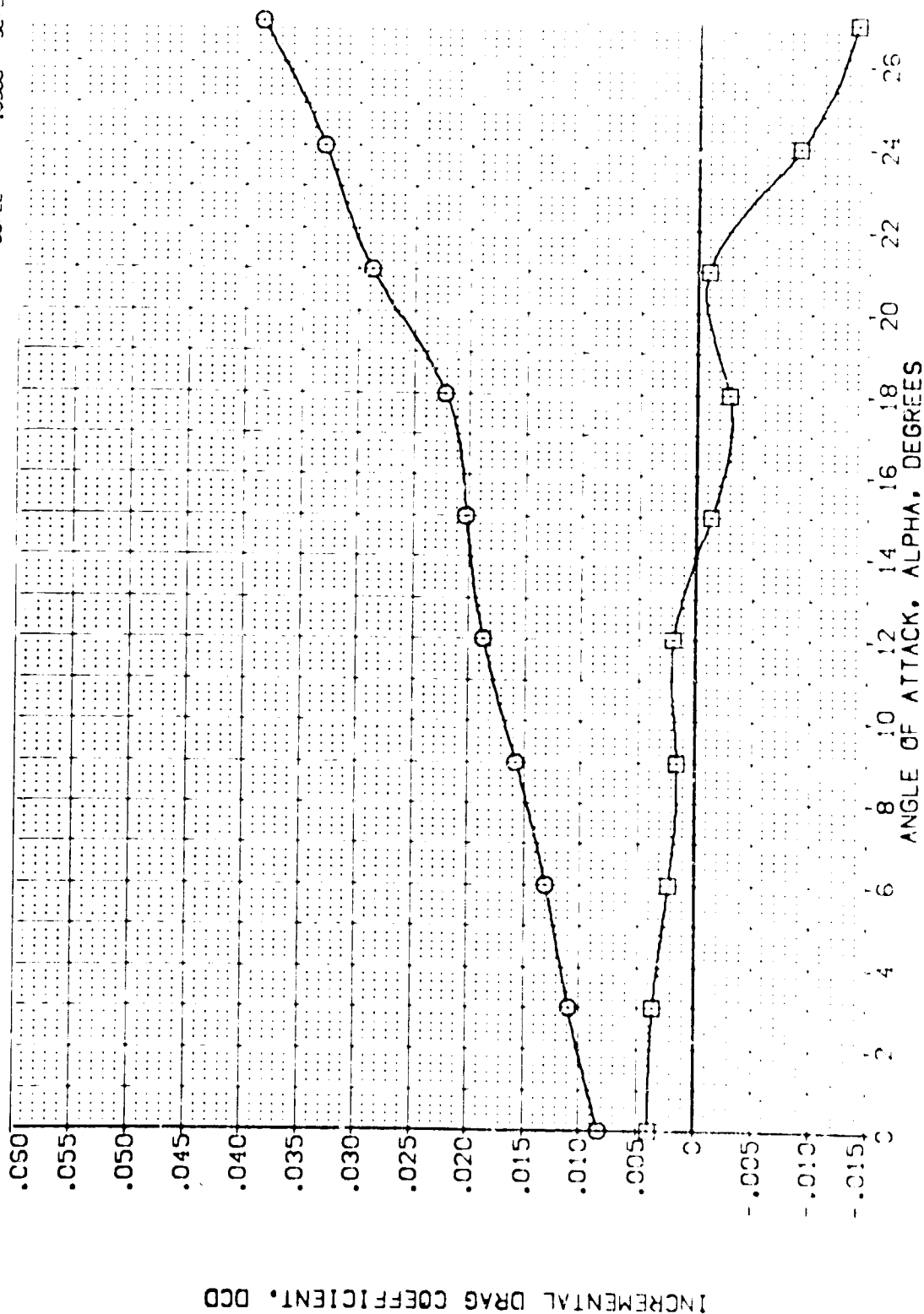


FIG. 8 BODYFLAP EFFECTS

(A)MAC = .60

DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 (VEJ010) □ ARC 11-747 GASSA B C H F V V NON: RNL  
 (VEJ011) □ ARC 11-747 GASSA B C H F V V NON: RNL

ELEVON ALLRON DBF SPOBRK  
 .000 .000 16.300 25.000  
 .000 .000 -11.700 25.000

REFERENCE INFORMATION  
 SREF 2.4210 SQ.FT.  
 LREF 14.2440 IN.  
 BREF 28.1004 IN.  
 XMRD 32.3010 IN.  
 YMRD .0000 IN.  
 ZMRD 11.2500 IN.  
 SCALE .00300

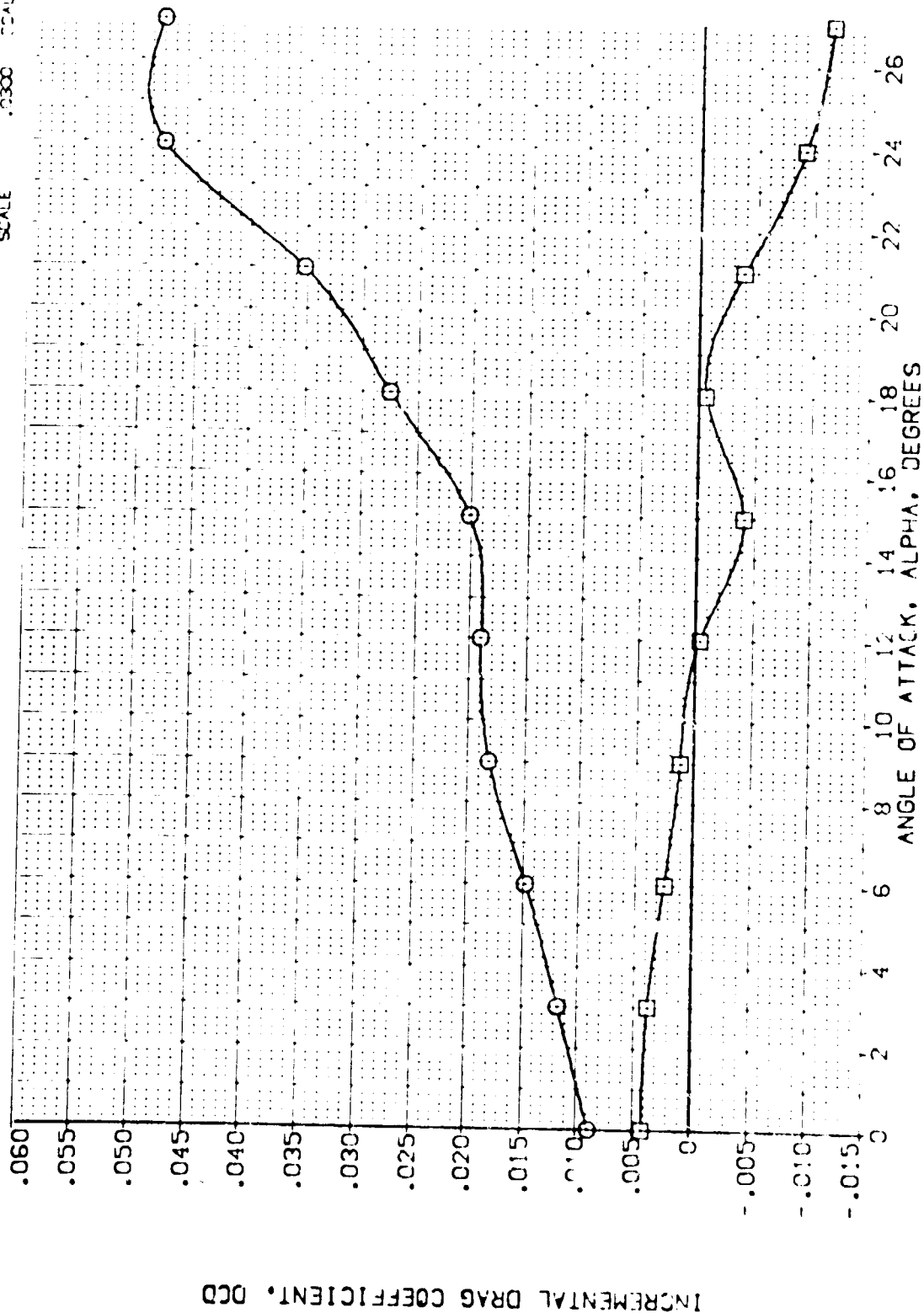


FIG. 8 BODYFLAP EFFECTS

(B)MACH - .80

DATA SET SYMBOL: (VEJ010) (VEJ011)

CONFIGURATION DESCRIPTION: ARC 11-747 DA53A B C M F V1 V NOM. RV/L

ELEVON: .000 .000

AILERON: .000 .000

DEF: 16.300 -11.700

SPEED-K: 25.000 25.000

REFERENCE INFORMATION: SREF 2.4210 SQ.FT. LREF 14.2440 IN. BREF 28.1004 IN. XMRP 32.3010 IN. YMRP .0000 IN. ZMRP 11.2500 IN. SCALE .0300

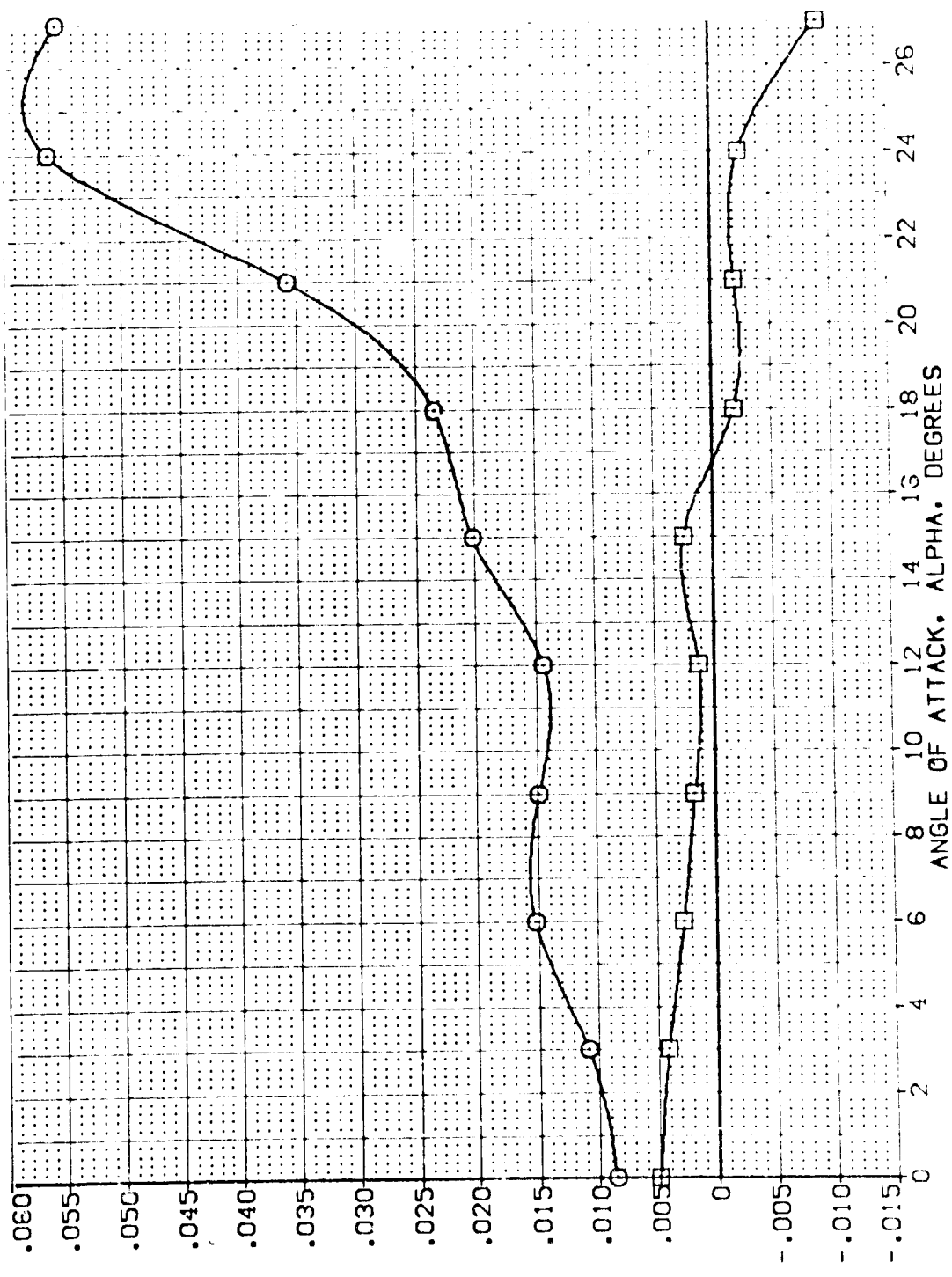


FIG. 8 BODYFLAP EFFECTS

(C)MACH = .90



DATA SET SYMBOL		CONFIGURATION DESCRIPTION		ELEVON		AILERON		DBF		SPOBRK		REFERENCE INFORMATION	
(VEJ010)	ARC 11-747	BA33A	B C M F VI V	.000	.000	.000	.000	16.300	25.000	SREF	2.4210	50. FT.	
(VEJ011)	ARC 11-747	BA33A	B C M F VI V	.000	.000	.000	.000	-11.700	25.000	LREF	14.2440	IN.	
										BREF	28.100%	IN.	
										XPRP	32.3010	IN.	
										YMRP	.0000	IN.	
										ZMRP	11.2500	IN.	
										SCALE	.0300	SCALE	

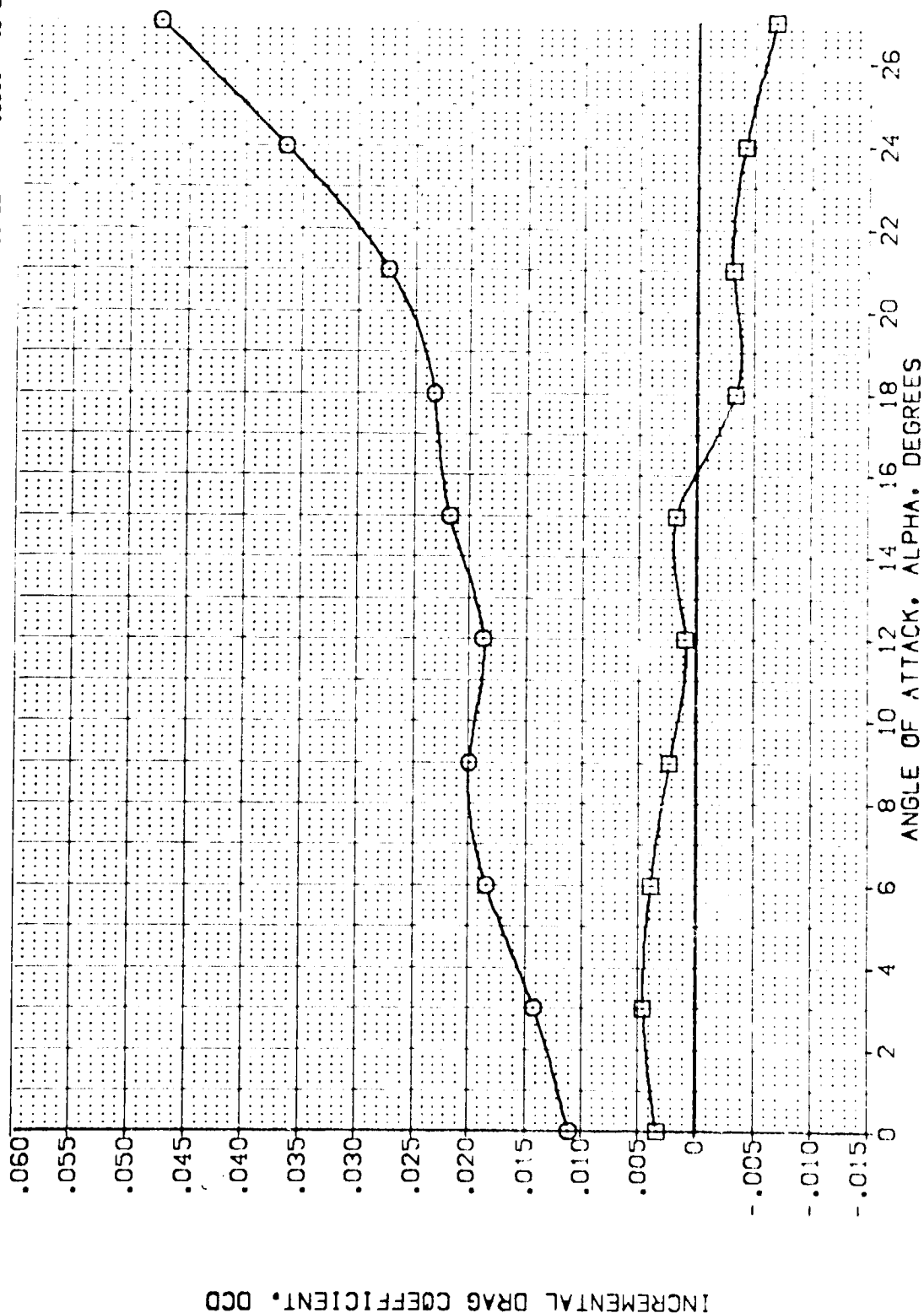


FIG. 8 BODYFLAP EFFECTS

(C)MACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVATION	ALL-ROUND	DEF	SPDRBK	REFERENCE INFORMATION
[VEJ010]	ARC 11-747 OAS3A B C H F VI V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
[VEJ011]	ARC 11-747 OAS3A B C H F VI V	.000	.000	-11.700	25.000	LREF 14.2440 IN.
						BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300 SCALE

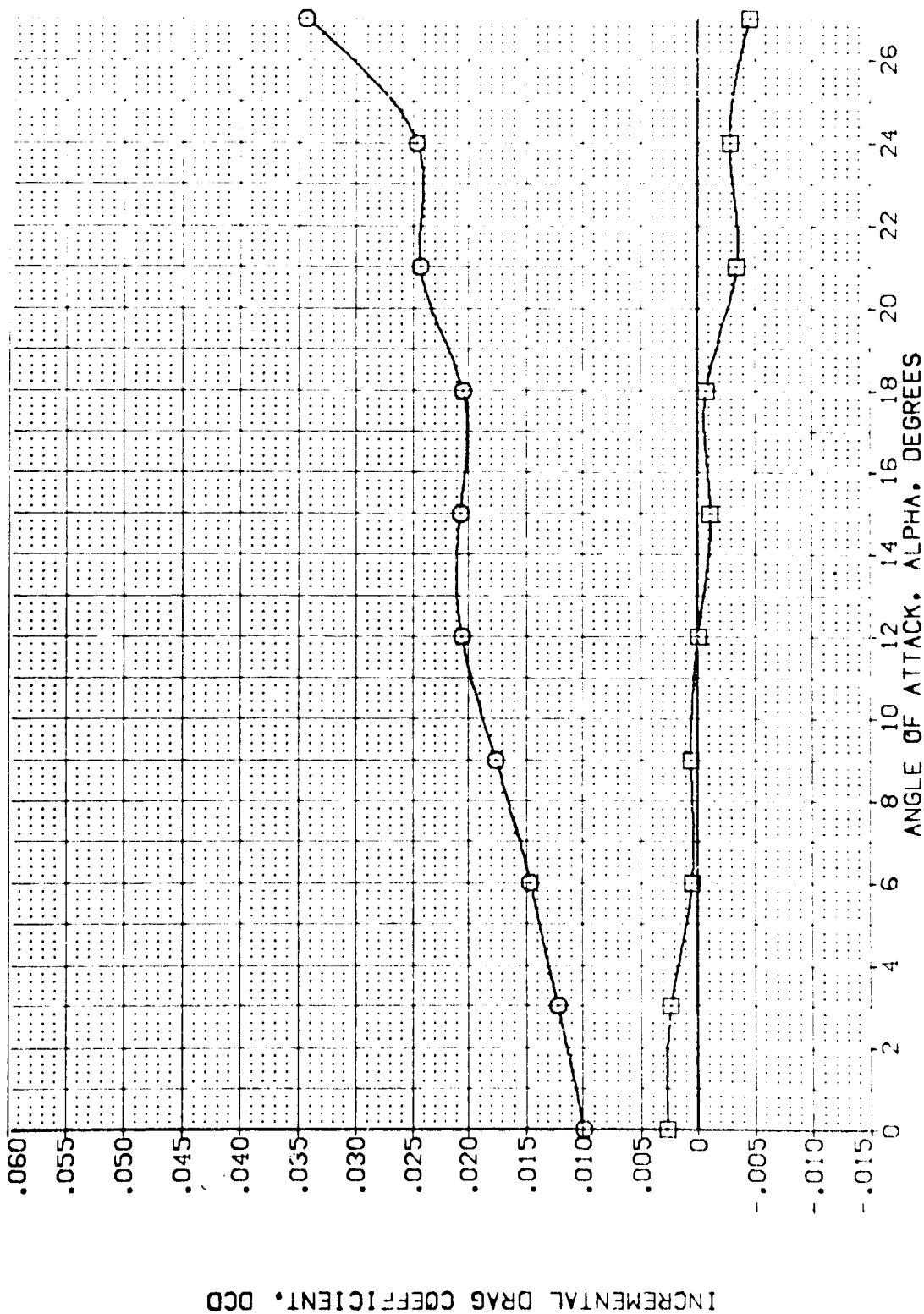


FIG. 8 BODYFLAP EFFECTS

(E)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	DBF	SPDRK	REFERENCE INFORMATION
{VEJ010}	ARC 11-747 OAS3A B C H F V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
{VEJ011}	ARC 11-747 OAS3A B C H F V	.000	.000	-11.700	25.000	LREF 14.2440 IN.
						BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

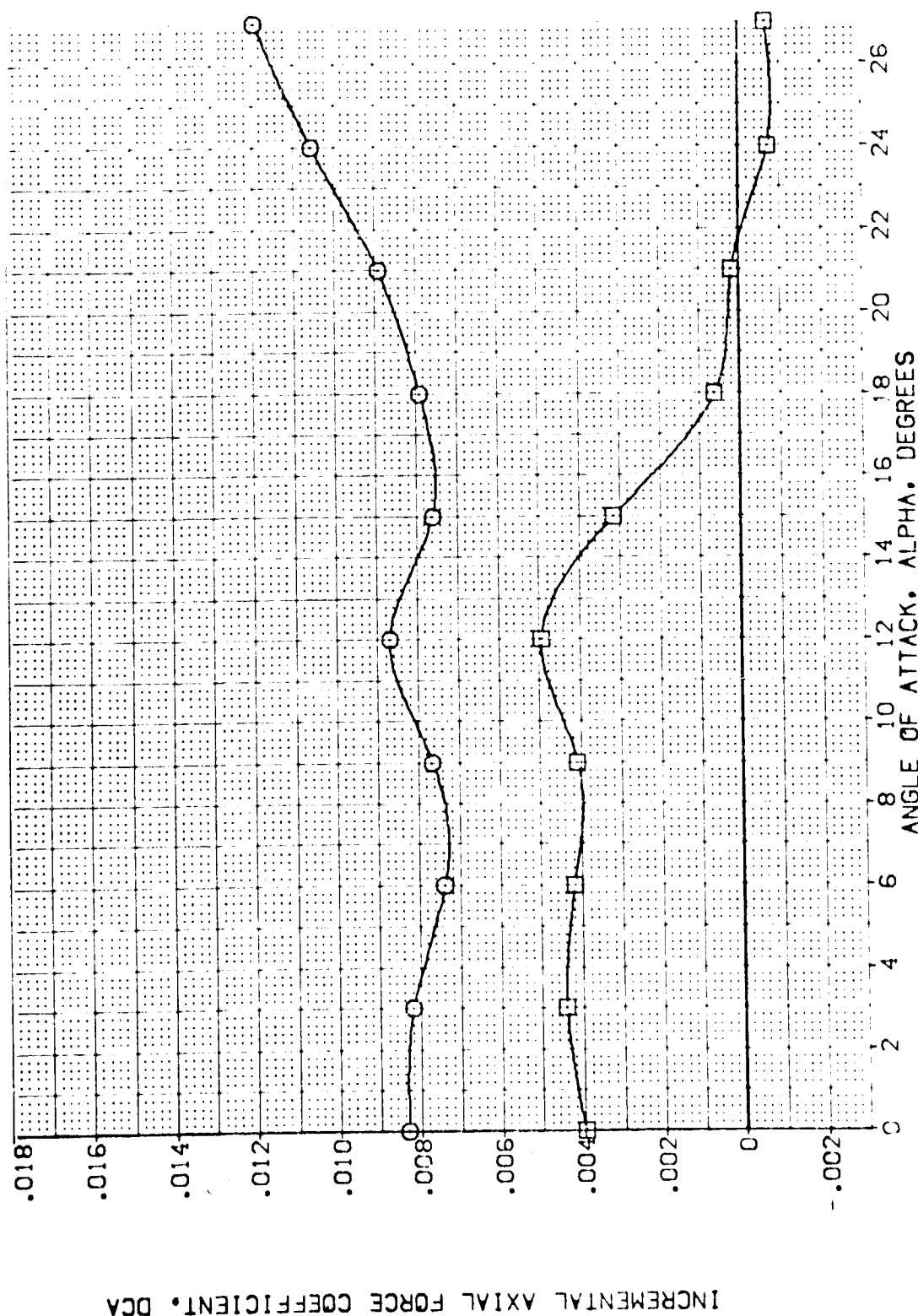


FIG. 8 BODYFLAP EFFECTS

(A)MACH = .60

DATA SET SYMBOL CONFIGURATION DESCRIPTION REFERENCE INFORMATION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	REFERENCE INFORMATION
(VEJ010)	ARC 11-747 BA53A B C M F V1 V	SREF 2.4210 SQ.FT.
(VEJ011)	ARC 11-747 BA53A B C M F V1 V	LREF 14.2440 IN.
		BREF 28.1004 IN.
		XMRP 32.3010 IN.
		YMRP .0000 IN.
		ZMRP 11.2500 IN.
		SCALE .0300

SPDRK 25.000  
DBF 16.300  
A1LRN .000  
A1LRN .000  
ELEVON .000  
ELEVON .000  
DBF -11.700  
DBF -11.700

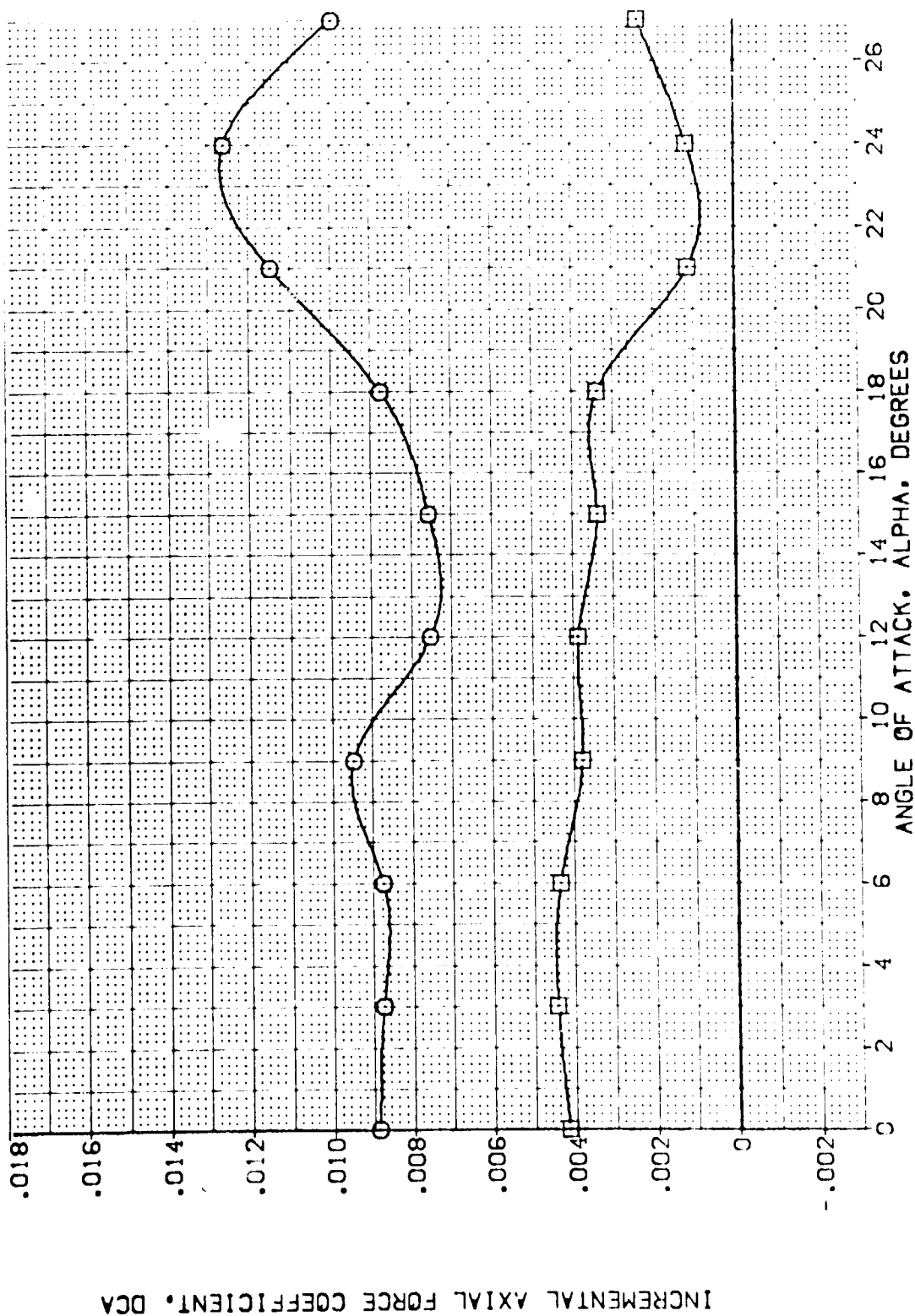


FIG. 8 BODYFLAP EFFECTS

(B)MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVATION	AIRLIFT	DBF	SPDBRK	REFERENCE INFORMATION
(VEJ010)	ARC 11-747 DA53A B C H F V I V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(VEJ011)	ARC 11-747 DA53A B C H F V I V	.000	.000	-11.700	25.000	LREF 14.2440 IN.
						BREF 28.1004 IN.
						XMRD 32.3010 IN.
						YMRD .0000 IN.
						ZMRD 11.2500 IN.
						SCALE .0300

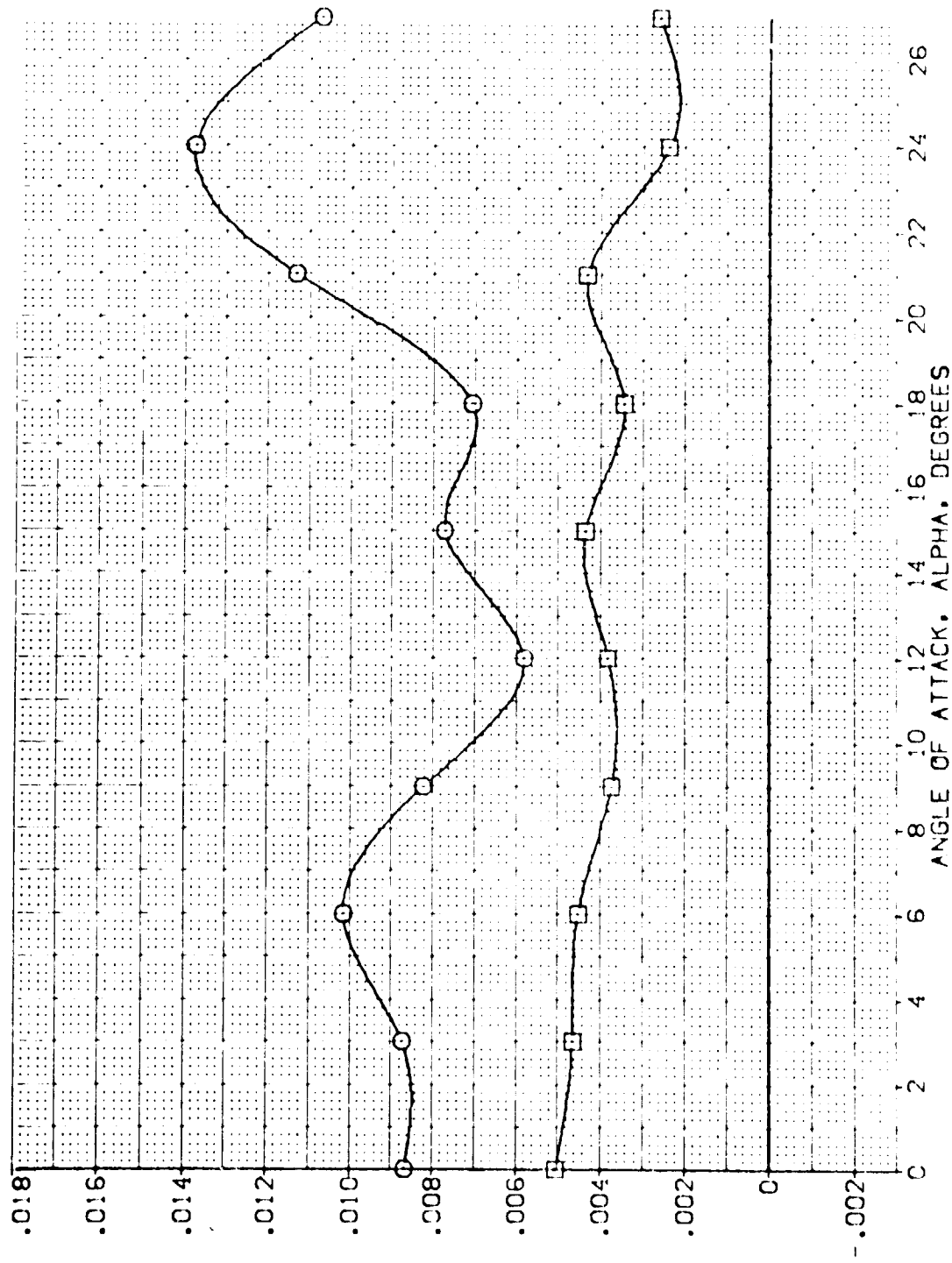


FIG. 8 JOOYFLAP EFFECTS

(COMAC) = .90



DATA SET SYMBOL: [VE4010] [VE4011] CONFIGURATION DESCRIPTION: ARC 11-747 BA53A B C H F VI V NOM: RN/L NOM: RN/L ELEVON: .000 .000 .000 .000 AILRON: .000 .000 .000 .000 DBF: 16.300 -11.700 SPOBRK: 25.000 25.000 REFERENCE INFORMATION: SREF: 2.4210 SQ. FT. LREF: 14.2440 BRPF: 28.1004 XMRP: 32.3010 YMRP: .0000 ZMRP: 11.2500 SCALE: .0000

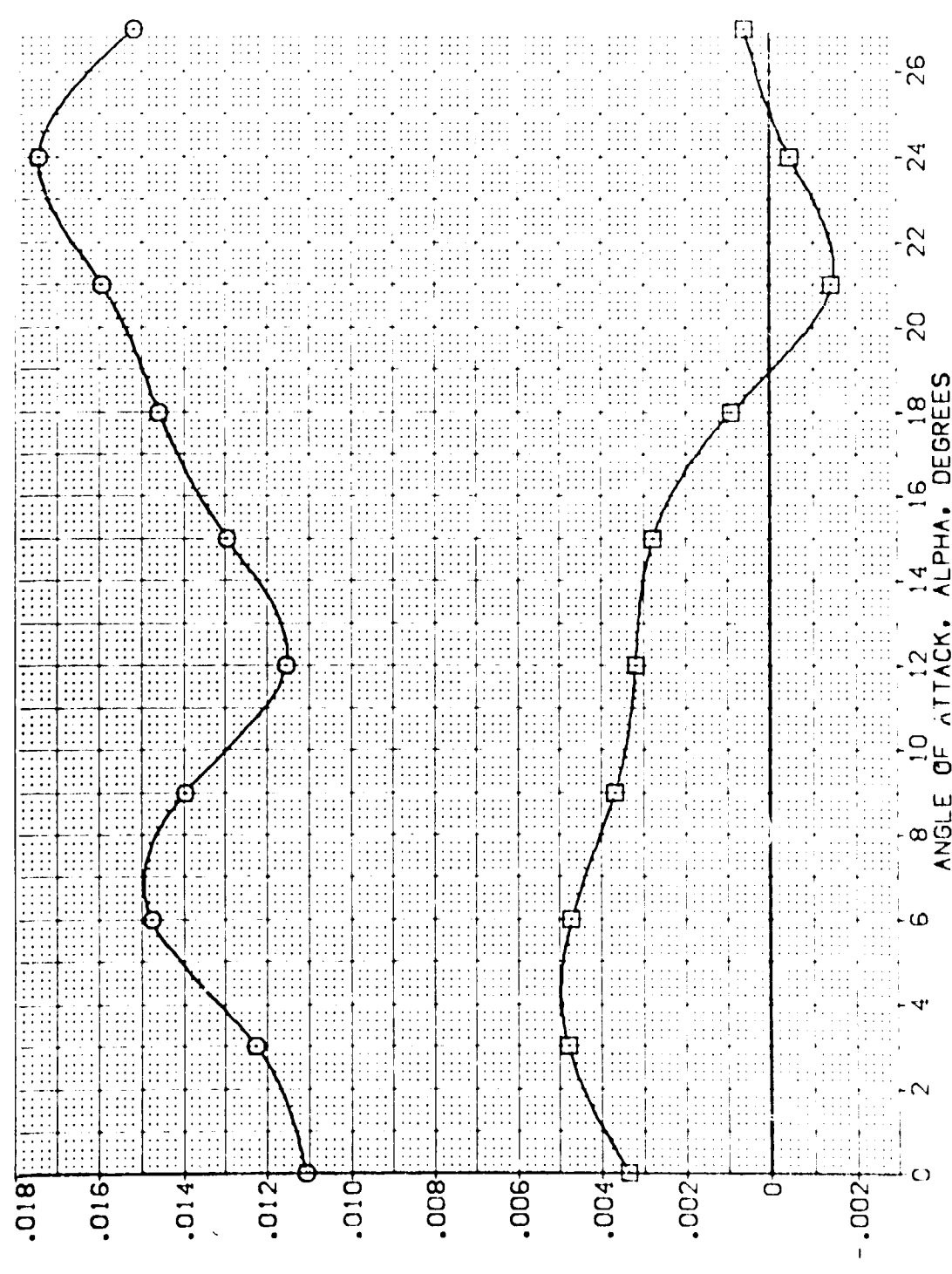


FIG. 8 BODYFLAP EFFECTS

[D]MACH = 1.05



DATA SET SYMBOL: 8  
 CONFIGURATION DESCRIPTION:  
 ARC 11-747 BAS3A B C M F VI V NOM. RV/L  
 ARC 11-747 BAS3A B C M F VI V NOM. RV/L

ELEVON: .000  
 AIRLON: .000  
 DEF: 16.300  
 SPOOR: 25.000

REFERENCE INFORMATION:  
 SREF: 2.4210 SQ. FT.  
 LREF: 14.2440 IN.  
 BREF: 28.1004 IN.  
 YMRP: 32.3010 IN.  
 YPRP: .0000 IN.  
 ZMRP: 11.2500 IN.  
 SCALE: .0300

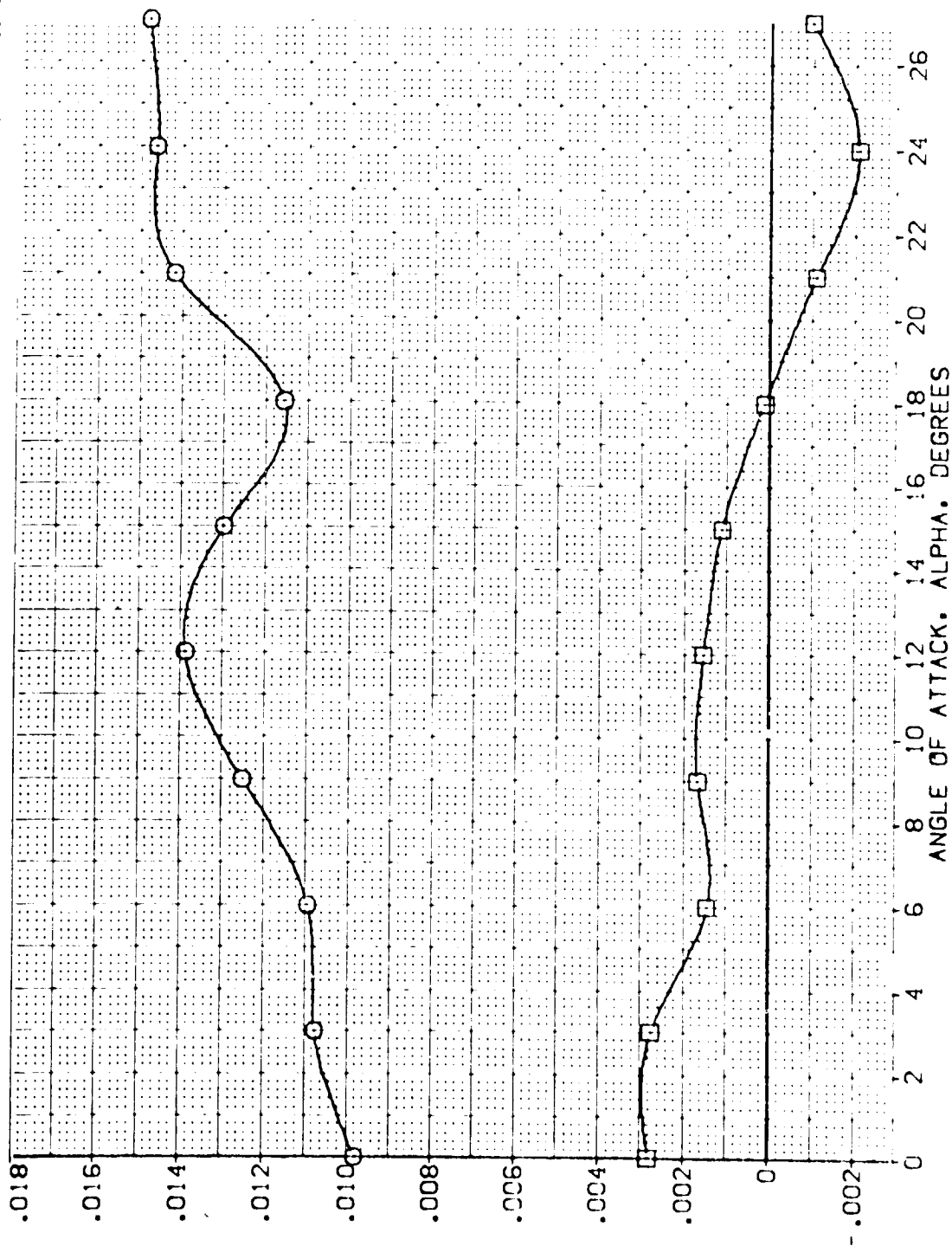


FIG. 8 BODYFLAP EFFECTS

(MACH = 1.20)

DATA SET SYMBOL    CONFIGURATION DESCRIPTION    ELEVATION    AIRFLOW    DBF    SP00BK    REFERENCE INFORMATION

[VEJ010]	ARC 11-747 DA53A B C M F V1 V	.000	.000	16.300	25.000	SREF	2.4210	SQ.FT.
[VEJ011]	ARC 11-747 DA53A B C M F V1 V	.000	.000	-11.700	25.000	LREF	14.2440	IN.
						DAEF	28.1004	IN.
						AMRP	32.5010	IN.
						YMRP	.0000	IN.
						ZMRP	11.2500	IN.
						SCALE	.0300	SCALE

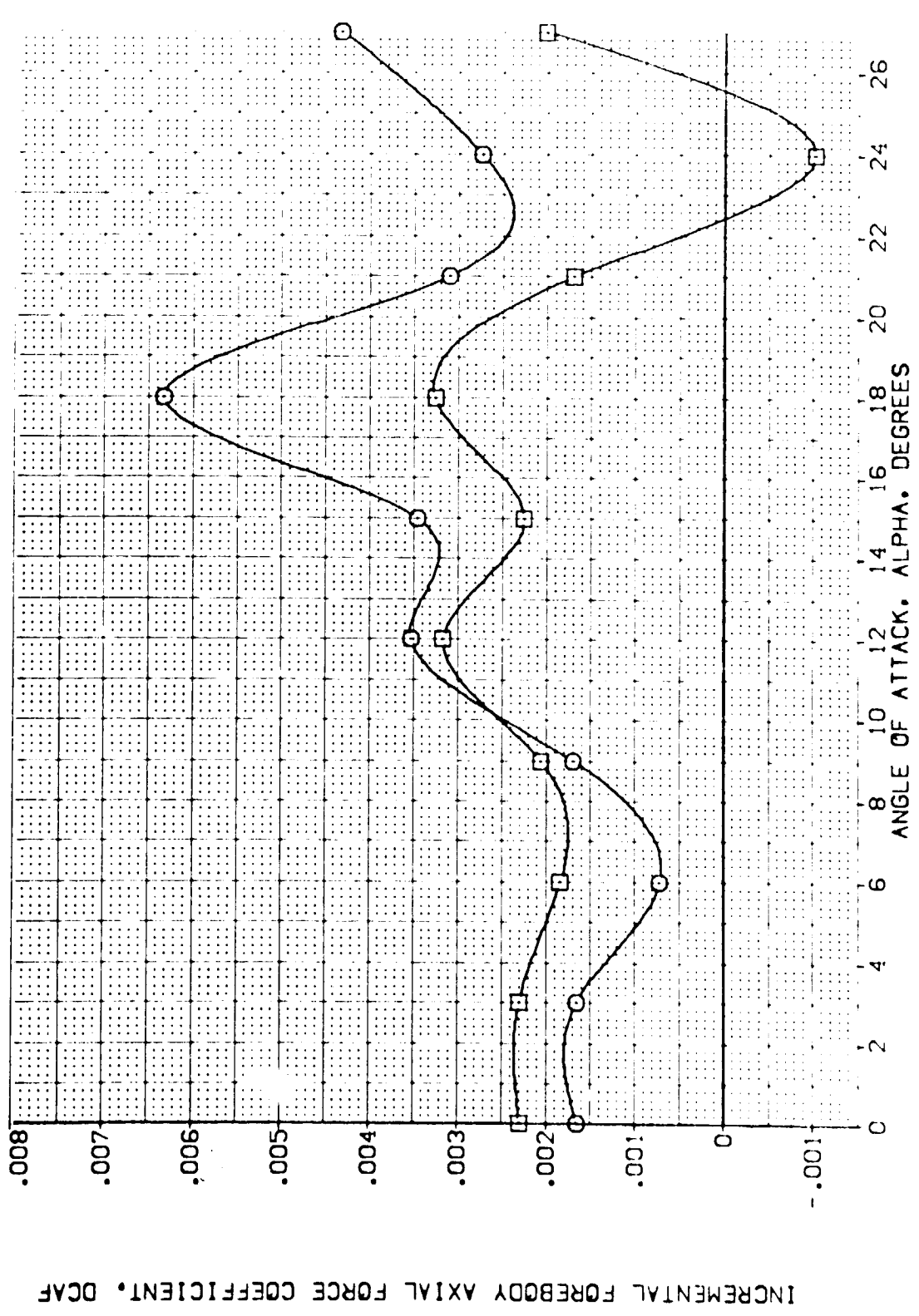


FIG. 8 BODYFLAP EFFECTS

(A)MACH = .60



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVATION	AIRLIFT	DBF	SPD BRK	REFERENCE INFORMATION
(VEJ010)	ARC 11-747 BAS3A B C H F VI V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(VEJ011)	ARC 11-747 BAS3A B C H F VI V	.000	.000	-11.700	25.000	LREF 14.2440
						BREF 28.1004
						XMPD 32.3010
						YMPD .0000
						ZMPD 11.2500
						SCALE .0300

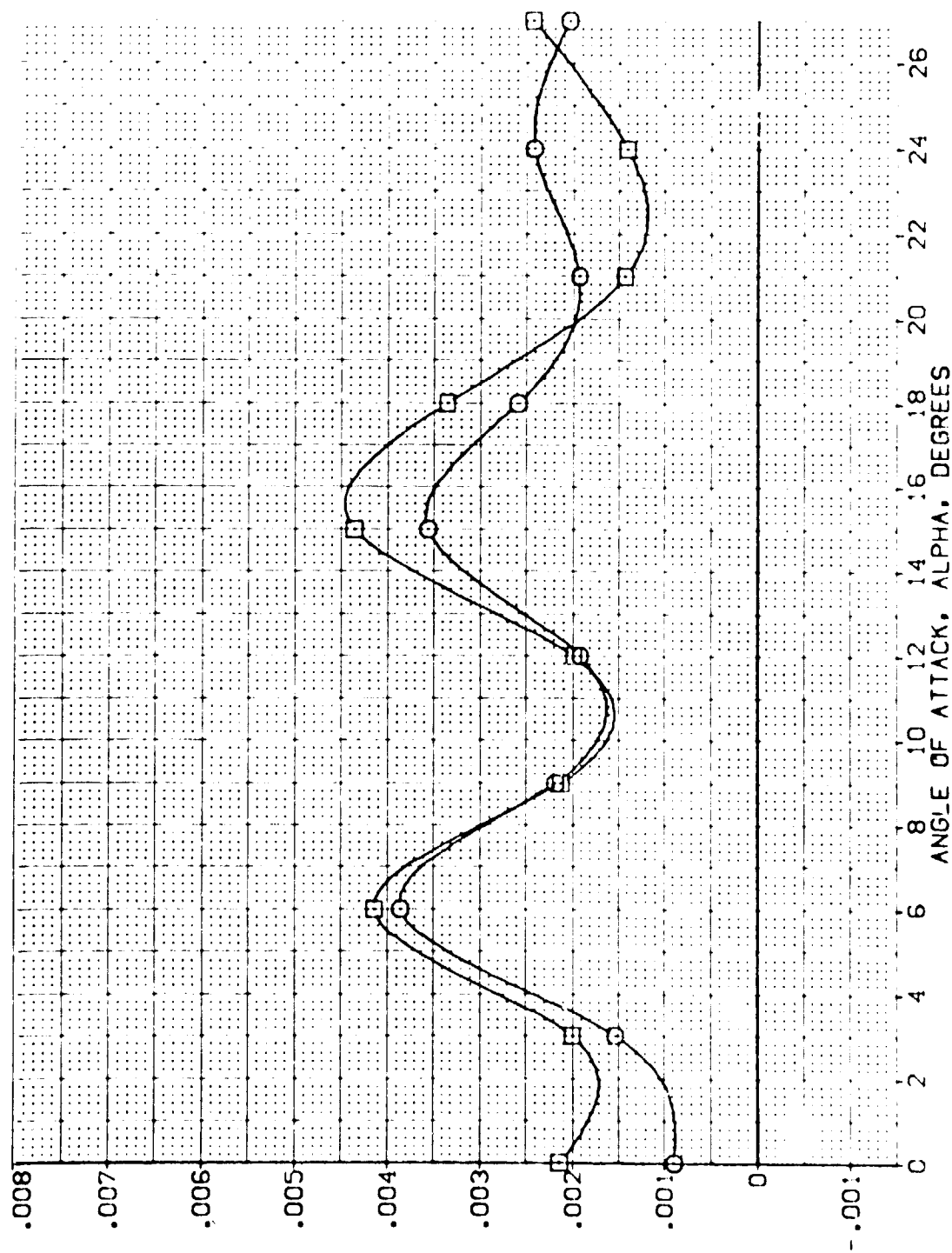
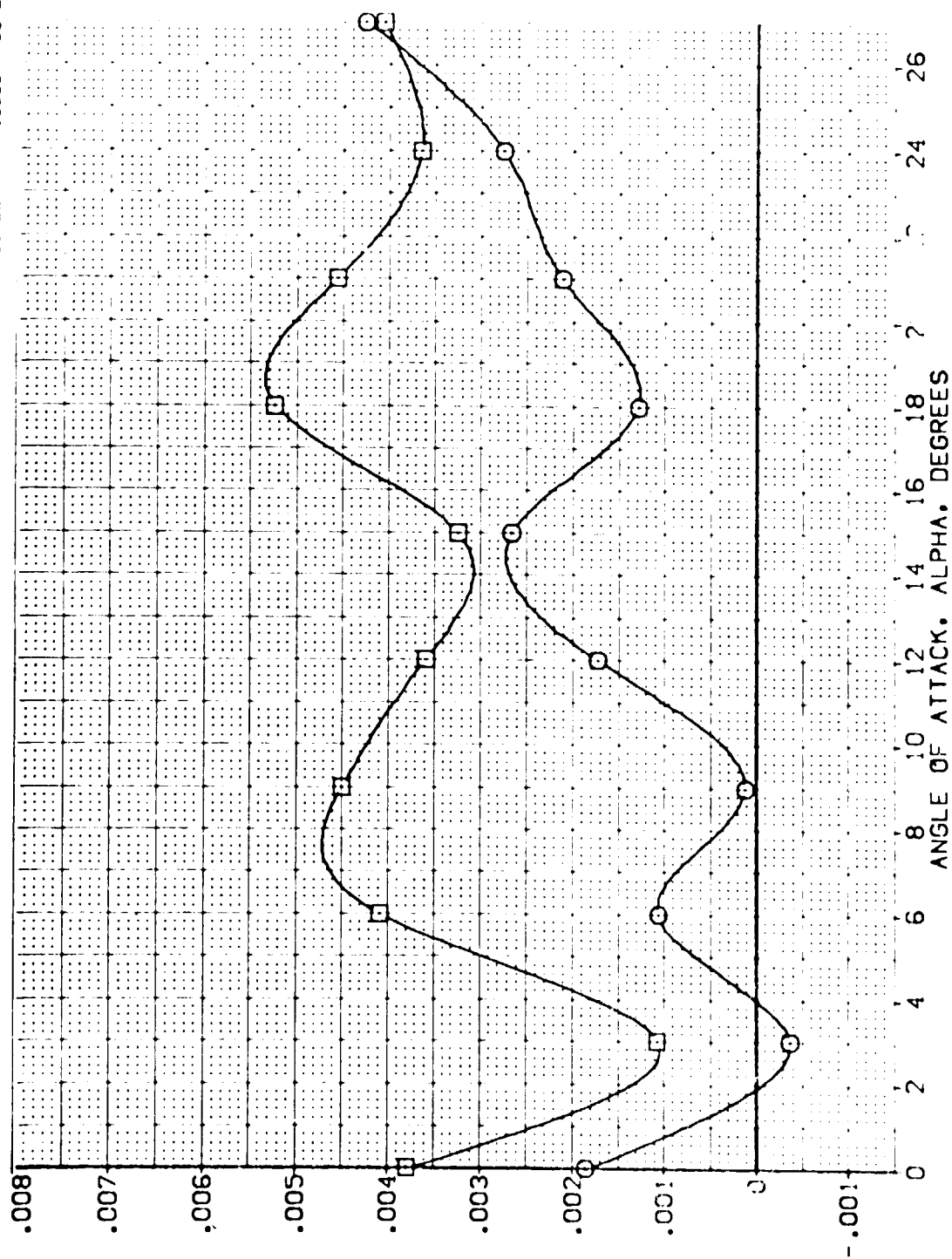


FIG. 8 BODYFLAP EFFECTS

(B)MACH = .80



DATA SET SYMBOL: [VEJ010] [VEJ011]  
 CONFIGURATION DESCRIPTION: ARC 11-747 GAS3A B C H F VI V NOT: RWL  
 ARC 11-747 GAS3A B C H F VI V NOT: RWL  
 ELEVON: .000 .000  
 AIRLON: .000 .000  
 DBF: 16.300 -11.700  
 SPOBRK: 25.000 25.000  
 REFERENCE INFORMATION:  
 SREF: 2.4210 SQ.FT.  
 LREF: 14.2440  
 BREF: 28.1004  
 XMRP: 32.3010  
 YMRP: .0000  
 ZMRP: 11.2500  
 SCALE: .0300



INCREMENTAL FOREBODY AXIAL FORCE COEFFICIENT, DCAF

FIG. 8 BODYFLAP EFFECTS

(C)MACH = .90

DATA SET SYMBOL: [VEJ010] [VEJ011]    CONFIGURATION DESCRIPTION: ARC 11-747 CAS3A B C H F V | V    NOM: RV/L    NOM: RV/L

ELEVON: .000    AILERON: .000    DBF: 15.300    SPDBRK: 25.000    25.000

REFERENCE INFORMATION: SREF: 2.4210    SQ.FT.    LREF: 14.2440    BREF: 28.1004    XMRP: 32.3010    YMRP: .0000    ZMRP: 11.2500    SCALE: .0300    SCALE

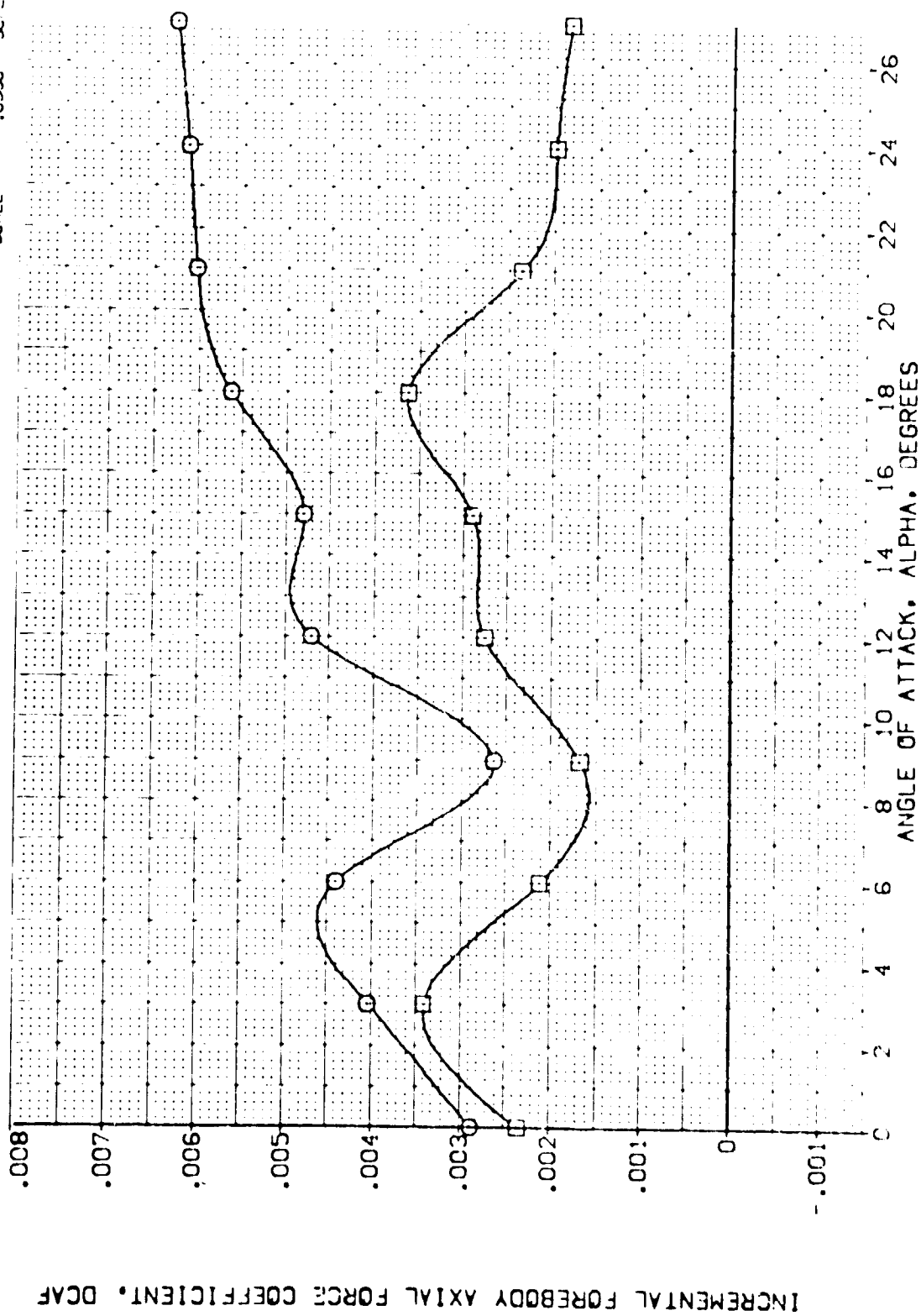


FIG. 8 BODYFLAP EFFECTS

COMAC = 1.05

DATA SET SYMBOL: B  
 CONFIGURATION DESCRIPTION: ARC 11-747 OAS3A B C H F VI V  
 REFERENCE INFORMATION: SREF 2.4210 SQ.FT.  
 LREF 14.2440 IN.  
 BREF 18.1004 IN.  
 XMRP 11.3010 IN.  
 YMRP 11.2500 IN.  
 ZMRP 11.2500 IN.  
 SCALE .0300

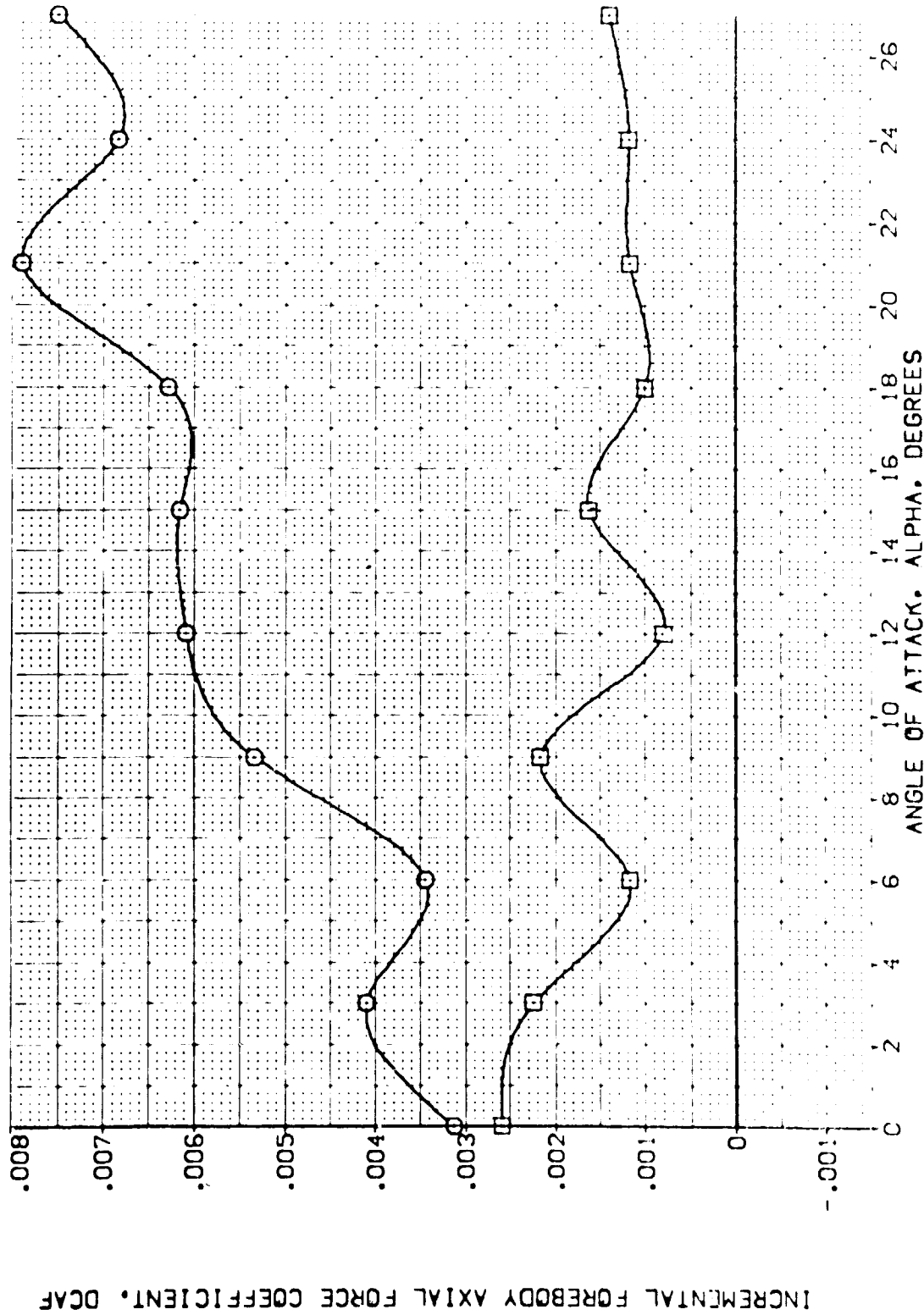


FIG. 8 BODYFLAP EFFECTS

(E)MAC = 1.20

DATA SET SYMBOL: [VEJ010] [VEJ011]  
 CONFIGURATION DESCRIPTION: ARC 11-747 CAS3A B C M F V1 V NON- RV/L  
 REFERENCE INFORMATION: SREF 2.4210 SQ. FT. LREF 14.2440 IN. BREF 28.1004 IN. XMRP 32.3010 IN. YMRP 0.0000 IN. ZMRP 11.2500 IN. SCALE 0.0300  
 ELEVATION: .000 .000 .000  
 AIRLIFT: .000 .000 .000  
 DEF: 16.300 -11.700  
 SPDRK: 25.000 25.000

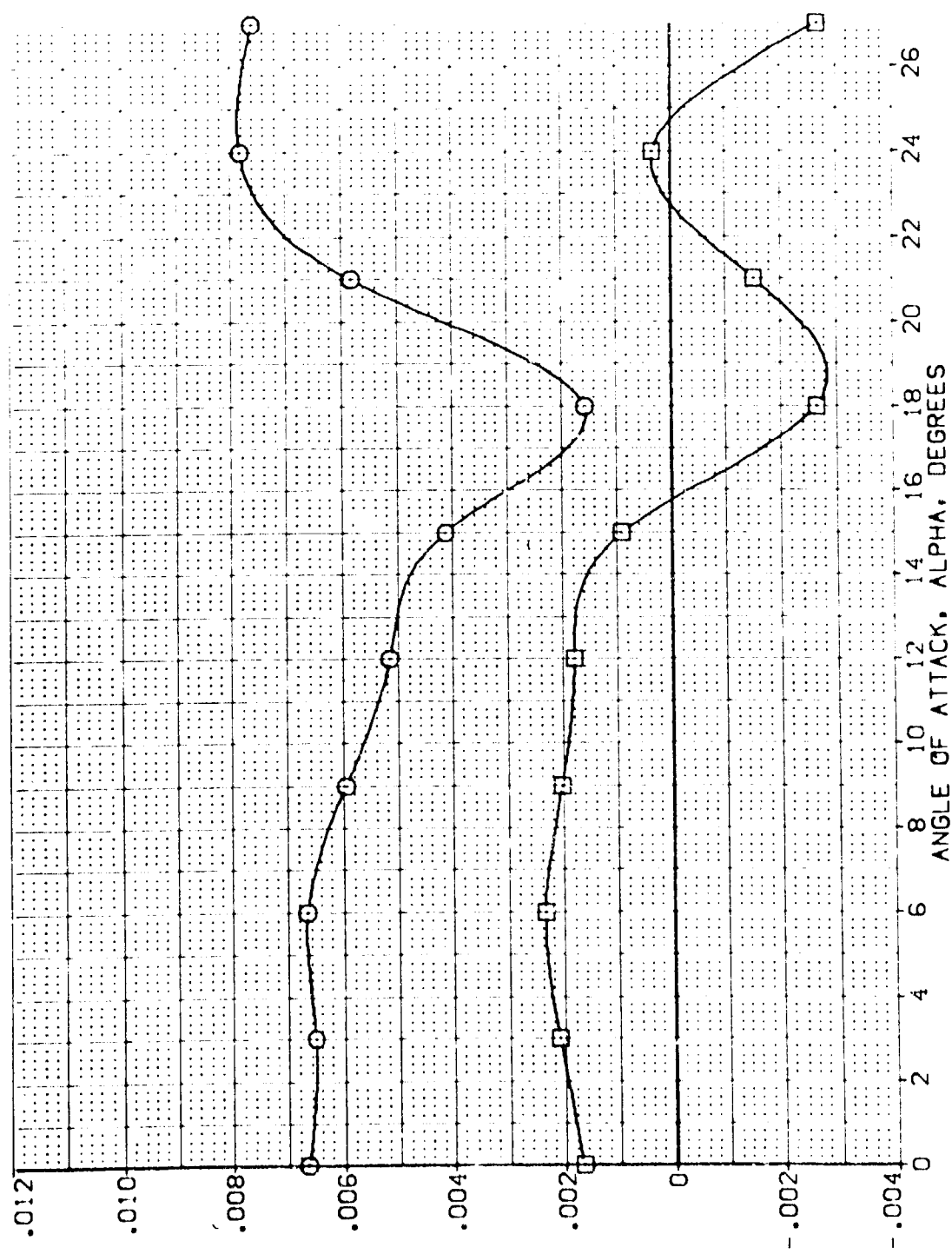


FIG. 8 BODYFLAP EFFECTS

(A)MACH = .60



ELEVATION	AIRLON	DBF	SPOBRK	REFERENCE INFORMATION	SG.FT.
.000	.000	16.300	25.000	SREF	2.4210
.000	.000	-11.700	25.000	LREF	14.2440
				BREF	28.1004
				XMRP	32.3010
				YMRP	.0000
				ZMRP	11.2500
				SCALE	.0000

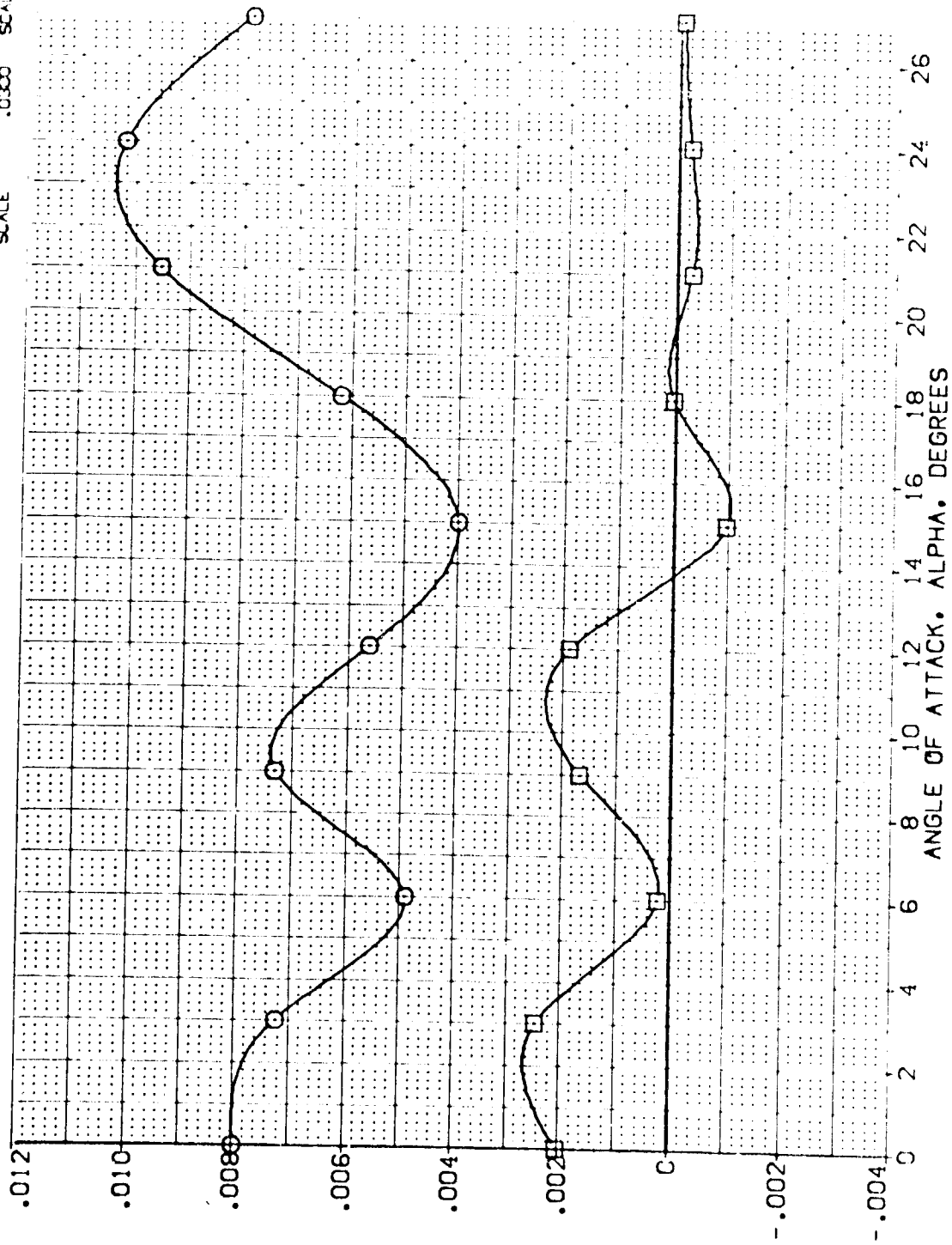


FIG. 8 BODYFLAP EFFECTS

$$(B)_{MACH} = .80$$

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	DBF	SPODBRK	REFERENCE INFORMATION
{VEJ010}	ARC 11-747 DA53A B C M F VI V	.000	.000	16.300	25.000	SIZE 2.4210 SQ.FT.
{VEJ011}	ARC 11-747 DA53A B C M F VI V	.000	.000	-11.700	25.000	LRPF 14.2440
						BRPF 28.1004
						XRPF 32.5010
						YMRP .0000
						ZMRP .0000
						SCALE 11.2500
						SCALE .0300

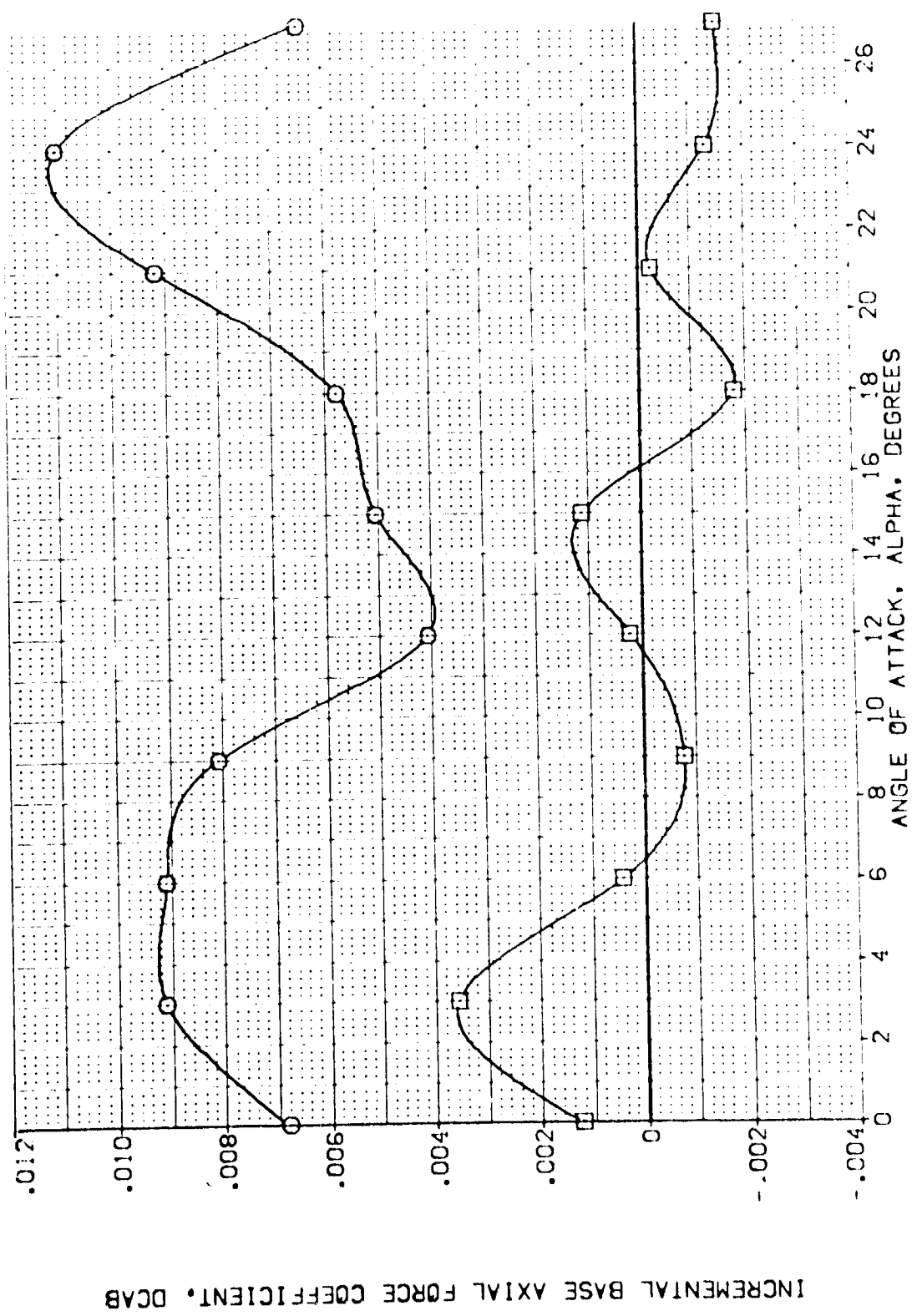
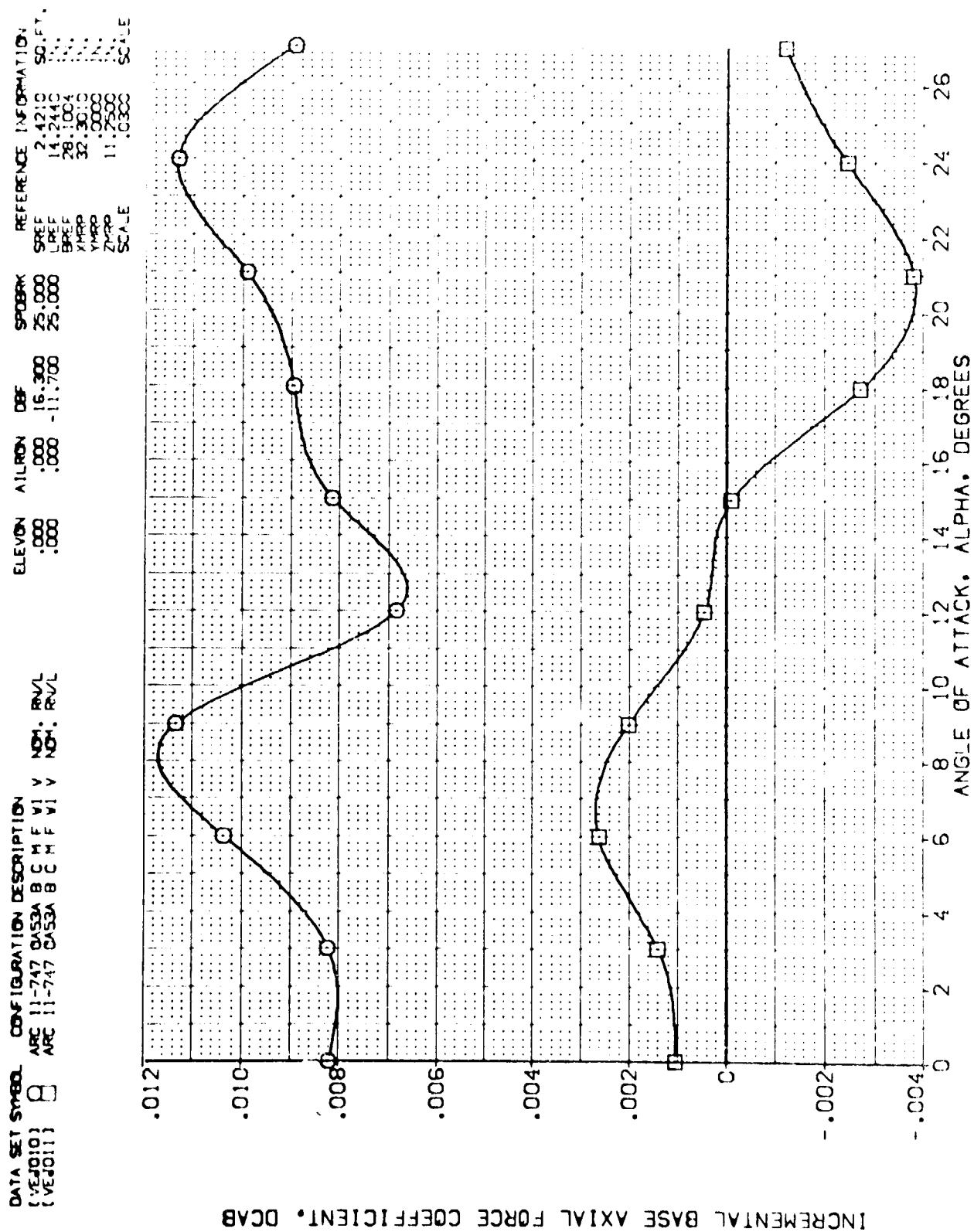
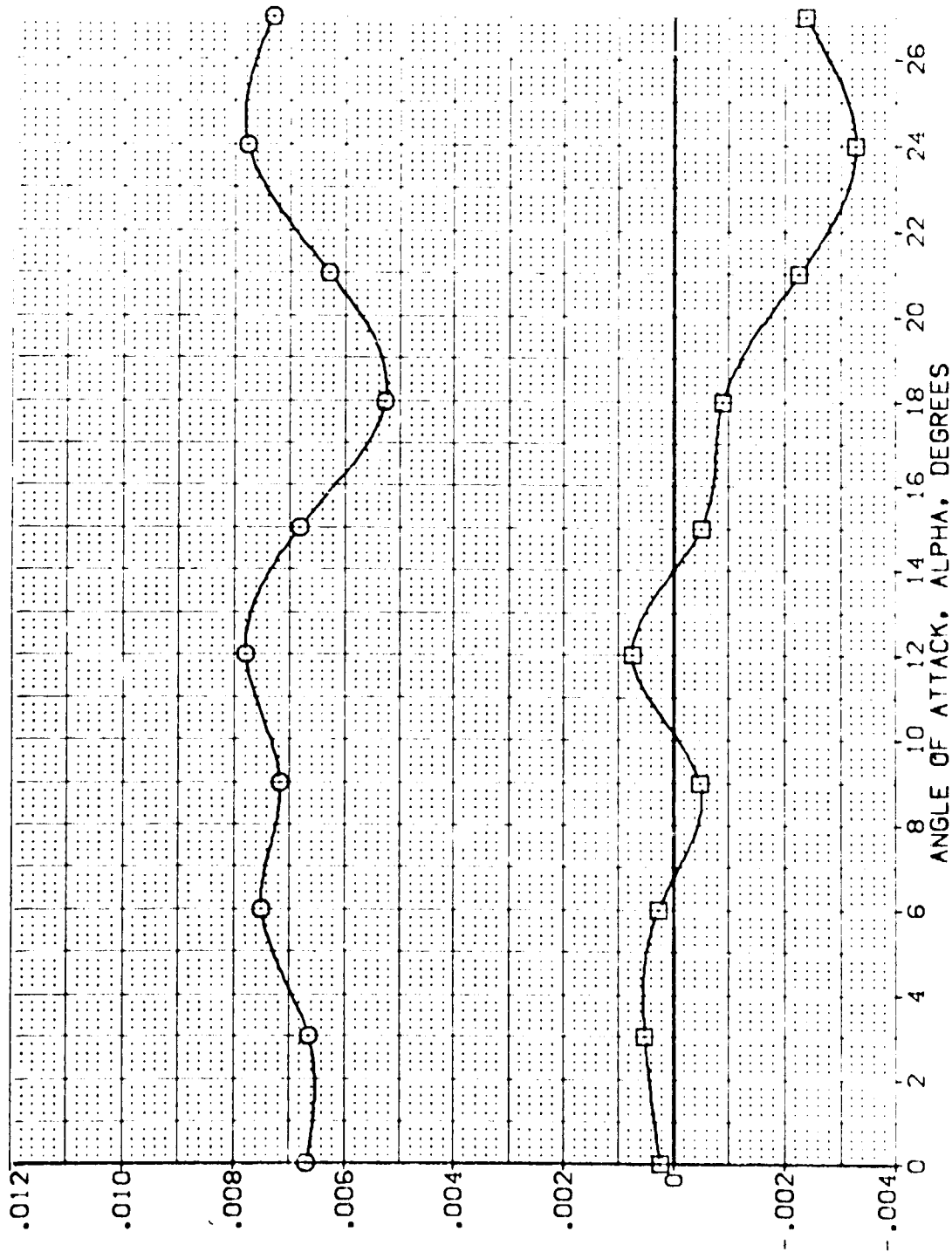


FIG. 8 BODYFLAP EFFECTS

(C)MACH = .90



DATA SET SYMBOL		CONFIGURATION DESCRIPTION		ELEVON		AILERON		DBF		SPDRBK		REFERENCE INFORMATION	
[VEJ010]	ARC 11-747	QAS3A	B C H F VI V	.000	.000	.000	.000	.000	.000	.000	.000	SREF	2.4210
[VEJ011]	ARC 11-747	QAS3A	B C H F VI V	.000	.000	.000	.000	.000	.000	.000	.000	LREF	14.2440
												BREF	28.1004
												XMRP	32.3010
												YMRP	.0000
												ZMRP	11.2500
												SCALE	.0300



INCREMENTAL BASE AXIAL FORCE COEFFICIENT, DCAB

FIG. 8 BCJYFLAP EFFECTS

(C)MAC = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	DBF	SPOBRK	REFERENCE INFORMATION
(VE4010)	ARC 11-747 BA53A B C M F VI V	.000	.000	16.300	25.000	SREF 2.4210 50. FT.
(VE4011)	ARC 11-747 BA53A B C M F VI V	.000	.000	-11.700	25.000	LREF 14.2440 IN.
						BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

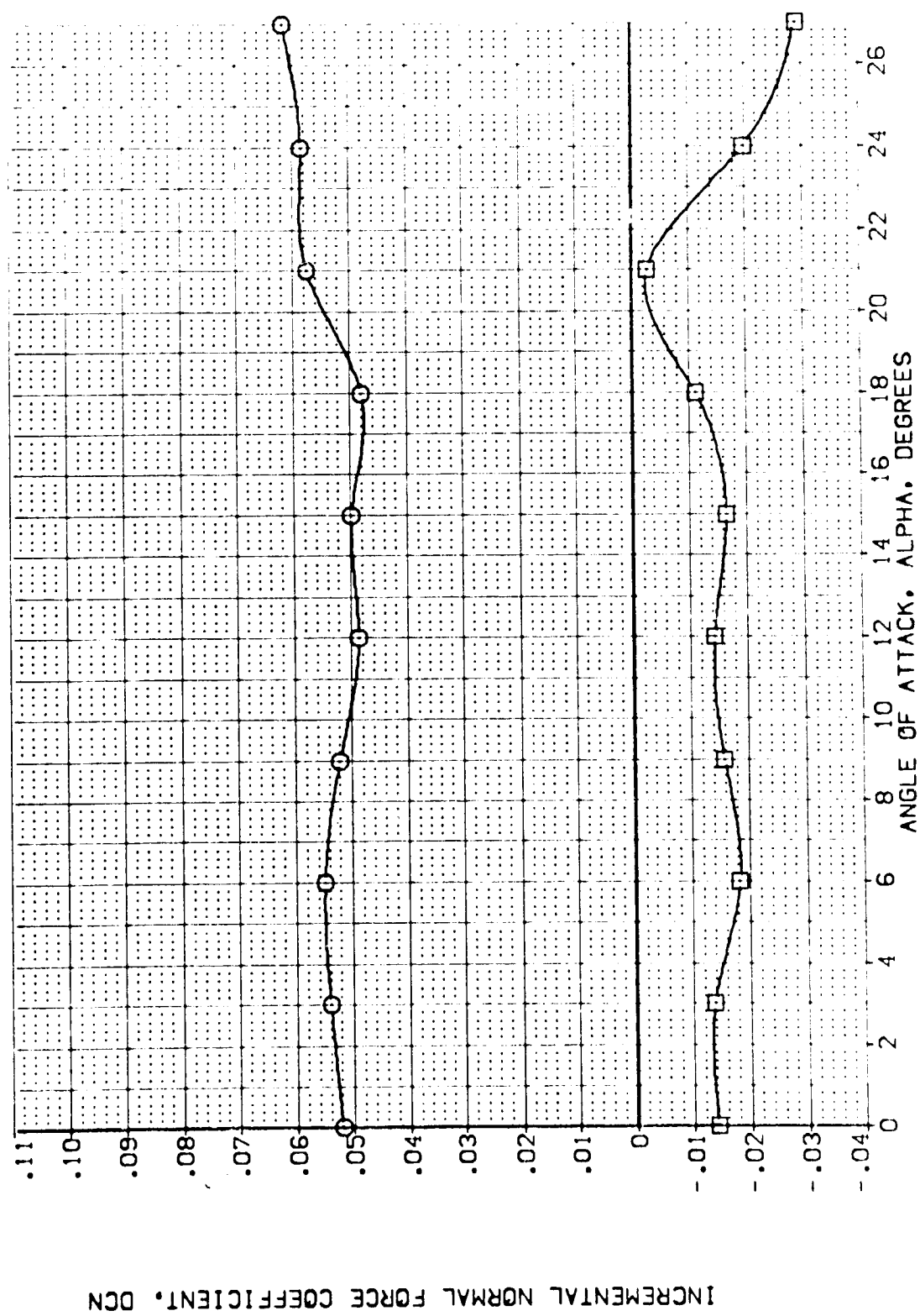


FIG. 8 BODYFLAP EFFECTS

(A)MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVATION	AIRLIFT	DBF	SPDRK	REFERENCE INFORMATION
[VEJ010]	ARC 11-747 CAS3A B C H F VI V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
[VEJ011]	ARC 11-747 CAS3A B C H F VI V	.000	.000	-11.700	25.000	LREF 1.2440 IN.
						BREF 1.004 IN.
						XREF 32.3010 IN.
						YREF .0000 IN.
						ZREF 11.2500 IN.
						SCALE .0300

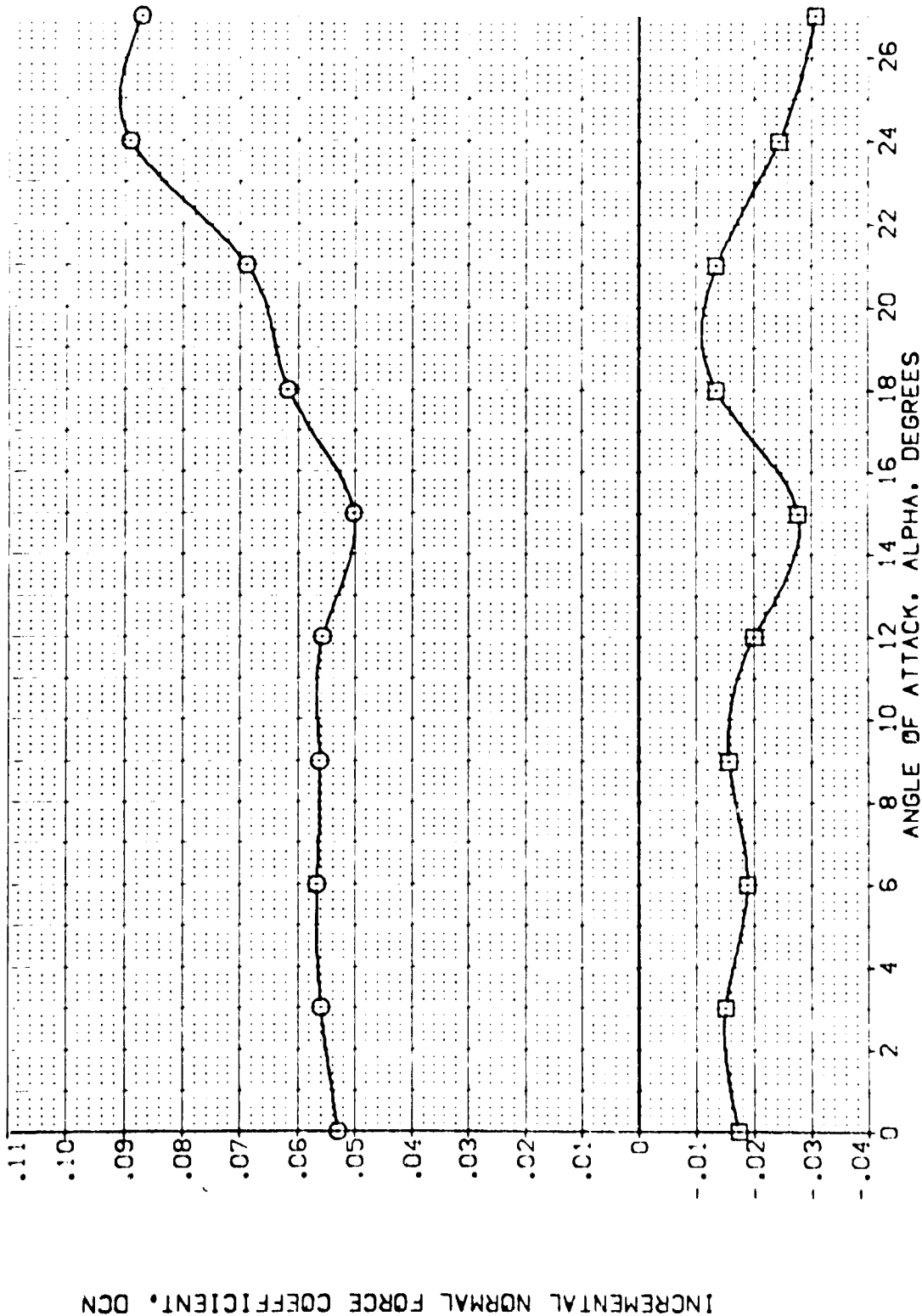
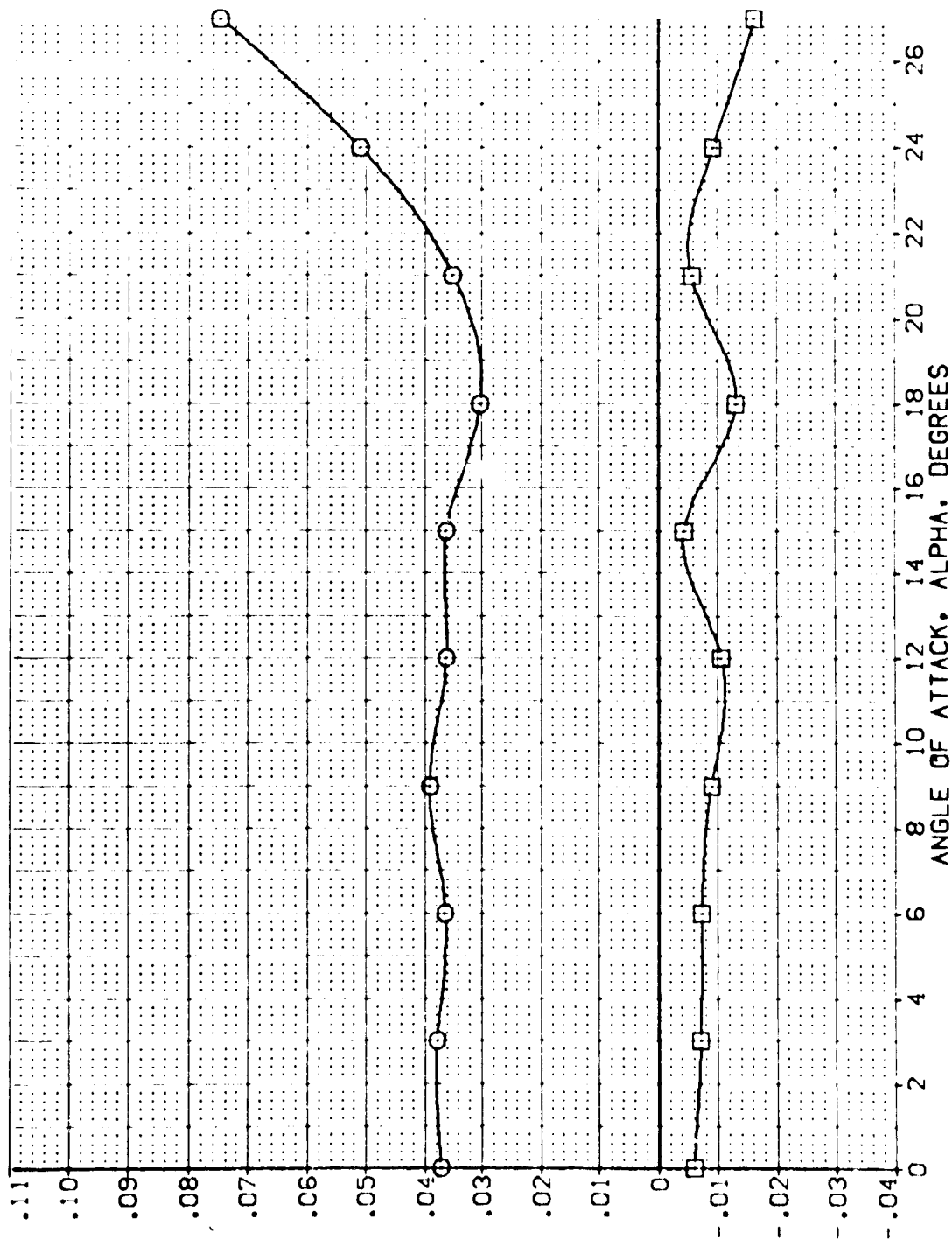


FIG. 8 BODYFLAP EFFECTS

(B)MAC = .80



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	DBF	SPOORX	REFERENCE INFORMATION
[VEJ010]	ARC 11-747 DA53A B C M F V1 V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
[VEJ011]	ARC 11-747 DA53A B C M F V1 V	.000	.000	-11.700	25.000	LREF 14.2442
						BREF 28.1004
						XMRP 32.3010
						YMRP .0000
						ZMRP 11.2500
						SCALE .0300



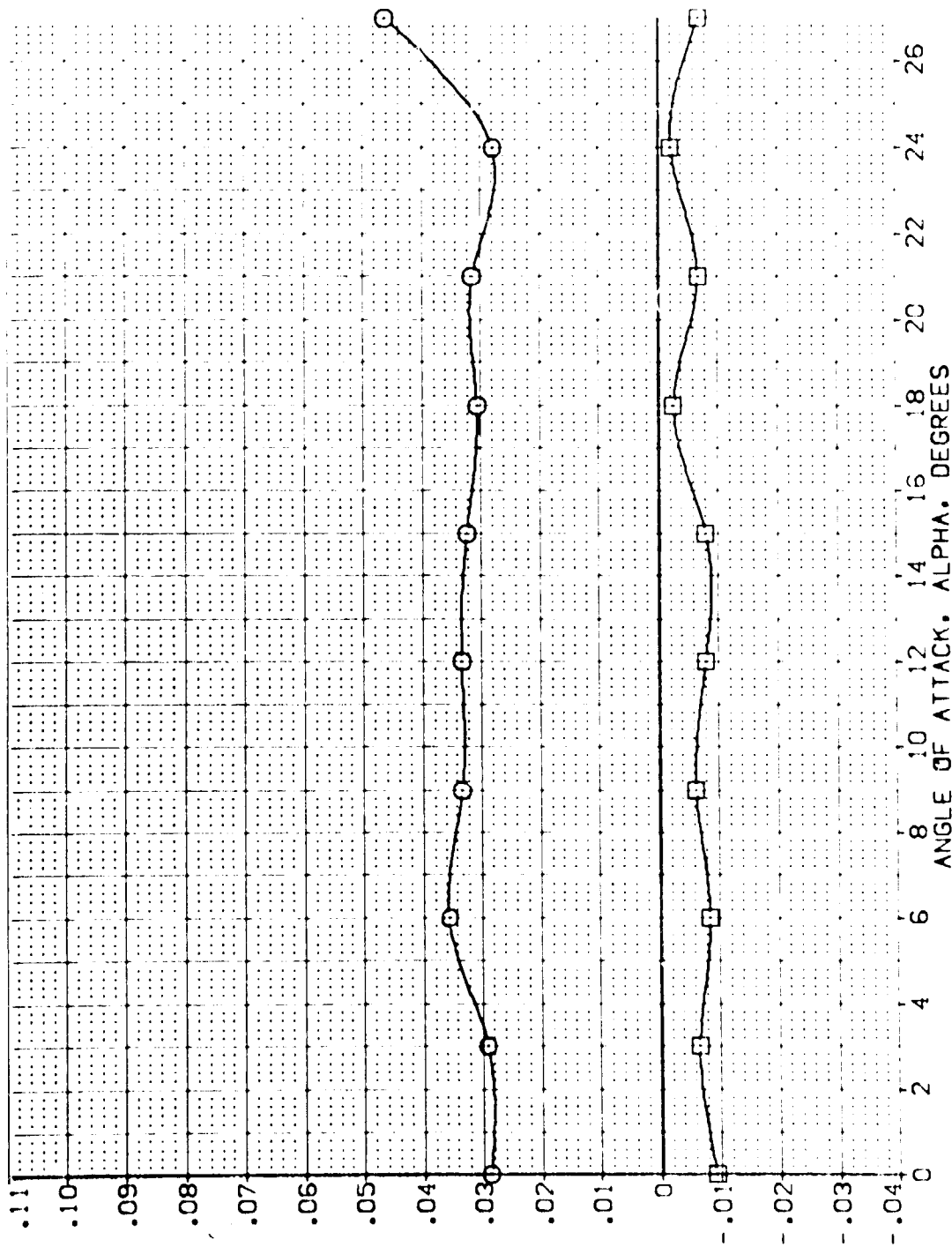
INCREMENTAL NORMAL FORCE COEFFICIENT, Dcn

FIG. 8 BODYFLAP EFFECTS

CDMACH = 1.05



DATA SET SYMBOL		CONFIGURATION DESCRIPTION		ELEVON		AILERON		DEF		SPDBRK		REFERENCE INFORMATION	
(VEJ010)	□	ARC 11-747	DA53A B C H F VI V	0.00	0.00	0.00	0.00	16.300	25.000	SREF	2.4210	50.171	
(VEJ011)	□	ARC 11-747	DA53A B C H F VI V	0.00	0.00	0.00	0.00	-11.700	25.000	LREF	14.2440	11.000	
										BREF	28.1004	11.000	
										XMPP	32.3010	11.000	
										YMPP	0.0000	11.000	
										ZMPP	11.2500	11.000	
										SCALE	0.300	SCALE	



INCREMENTAL NORMAL FORCE COEFFICIENT, DCN

FIG. 8 BODYFLAP EFFECTS

(E)MACH = 1.20



DATA SET SYMBOL: [VEJ010] [VEJ011] CONFIGURATION DESCRIPTION: ARC 11-747 BA53A B C H F VI V NOM: RV/L ARC 11-747 BA53A B C H F VI V NOM: RV/L

ELEVATION	AIRLON	DEF	SPOBRK	REFERENCE INFORMATION:
.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
.000	.000	-11.700	25.000	LREF 14.2440 IN.
				BREF 28.1004 IN.
				XMRP 32.3010 IN.
				YMRP 32.3010 IN.
				ZMRP 11.2500 IN.
				SCALE .0300

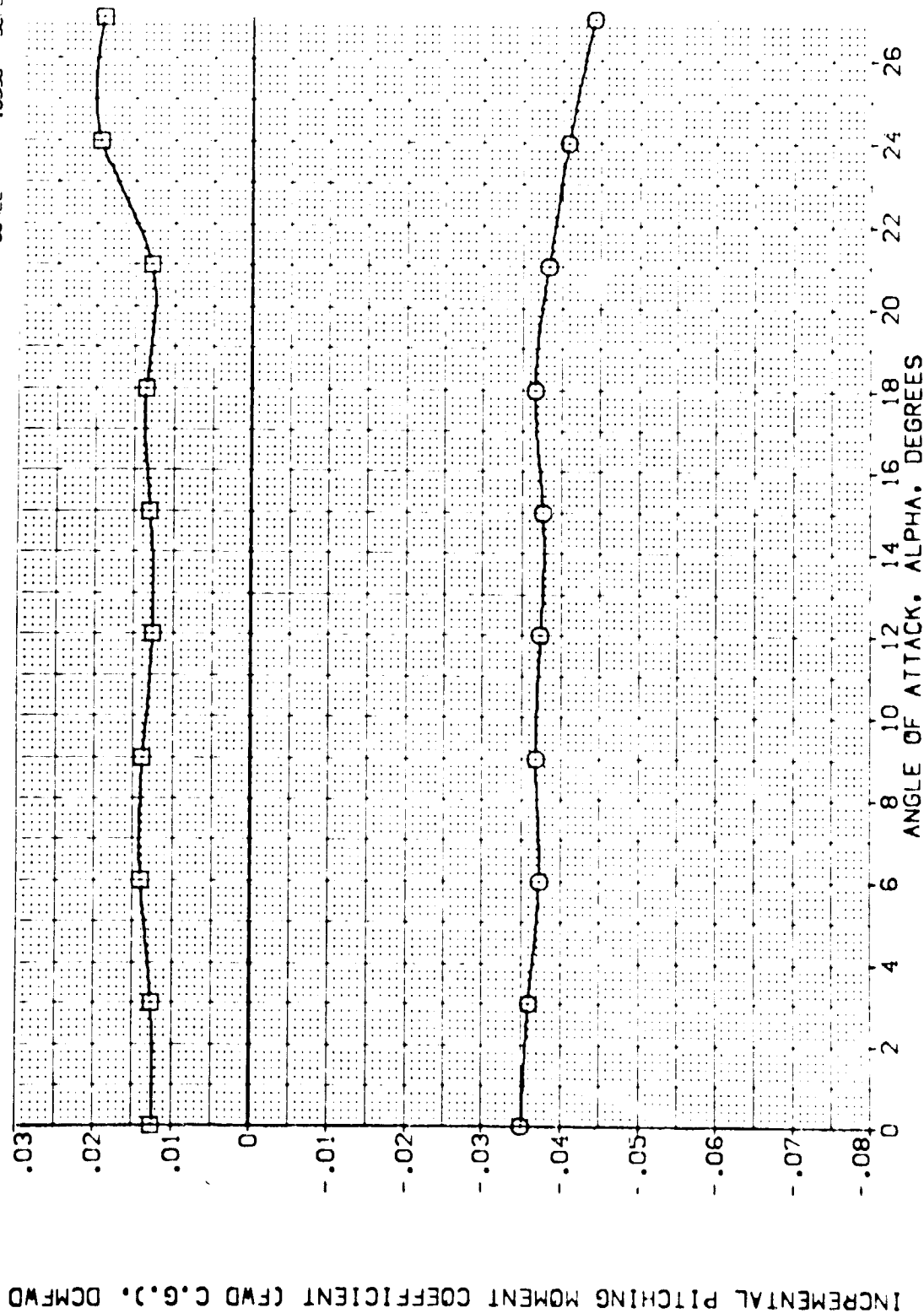


FIG. 8 BODYFLAP EFFECTS

(A)MACH = .60



DATA SET SYMBOL CONFIGURATION DESCRIPTION REFERENCE INFORMATION

(VEJ010)	ARC 11-747 0A53A B C M F V I V	NOM: RV/L	ELEVON	AIR/ON	DBF	SPOBARK	SREF	2.4210	50.000
(VEJ011)	ARC 11-747 0A53A B C M F V I V	NOM: RV/L	.000	.000	16.300	25.000	LREF	14.2440	25.000
			.000	.000	-11.700	25.000	BREF	28.1004	
							XMRD	32.3010	
							YMRD	.0000	
							ZMRD	11.2500	
							SCALE	.0300	SCALE

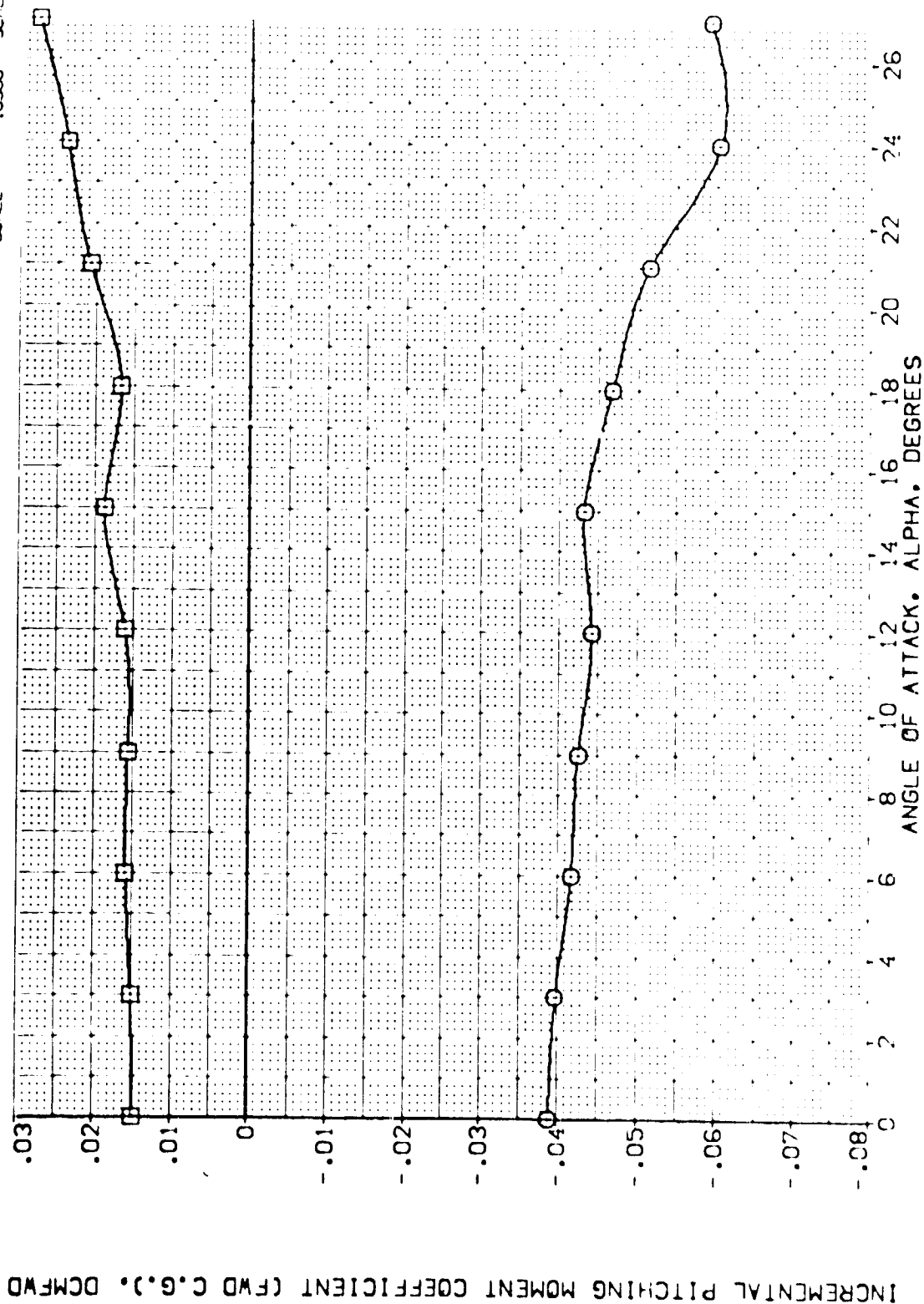


FIG. 8 BODYFLAP EFFECTS

(B)MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	DBF	SPDRBK	REFERENCE INFORMATION
(VEJ010)	ARC 11-747 QAS3A B C H F VI V	.000	.000	16.300	25.000	SREF 2.4210 50. FT.
(VEJ011)	ARC 11-747 QAS3A B C H F VI V	.000	.000	-11.700	25.000	LREF 14.2440
						BREF 28.1004
						XMRD 32.3010
						YMRD .0000
						ZMRD .0000
						SCALE 11.2500
						SCALE .0300

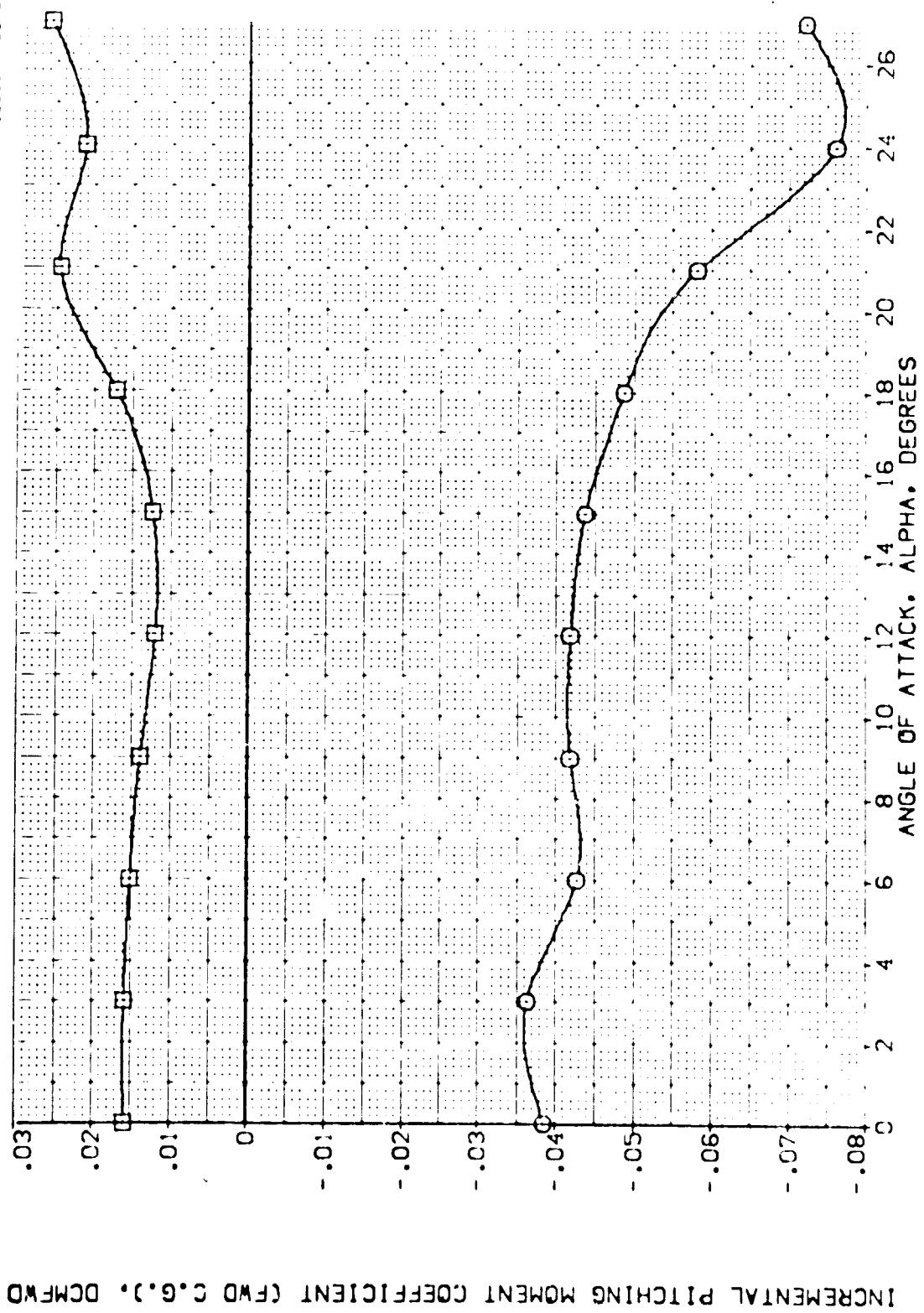


FIG. 8 300YFLAP EFFECTS

(C)MAC = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	DBF	SP00BK	REFERENCE INFORMATION
(VEJ010)	ARC 11-747 0A53A B C M F V I V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(VEJ011)	ARC 11-747 0A53A B C M F V I V	.000	.000	-11.700	25.000	LREF 14.2440
						BREF 28.1004
						XPRP 32.3010
						YPRP .0000
						ZPRP .0000
						SCALE 11.2500
						SCALE .0300

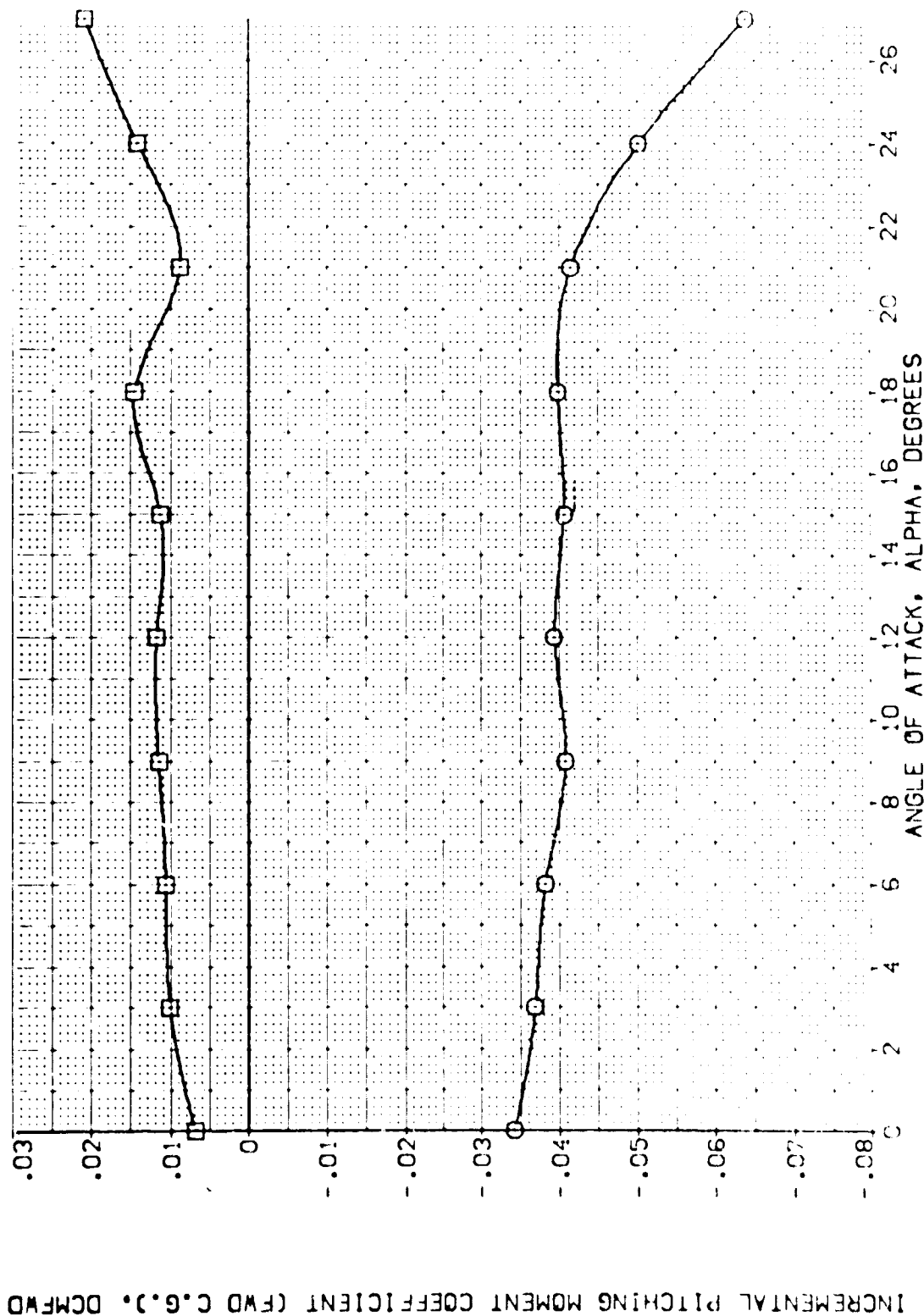


FIG. 8 BODYFLAP EFFECTS

(DJ)MAC- 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	DBF	SPDRBK	REFERENCE INFORMATION
{VEJ010}	ARC 11-747 DA53A B C M F VI V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
{VEJ011}	ARC 11-747 DA53A B C M F VI V	.000	.000	-11.700	25.000	LREF 14.2440 IN.
						BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

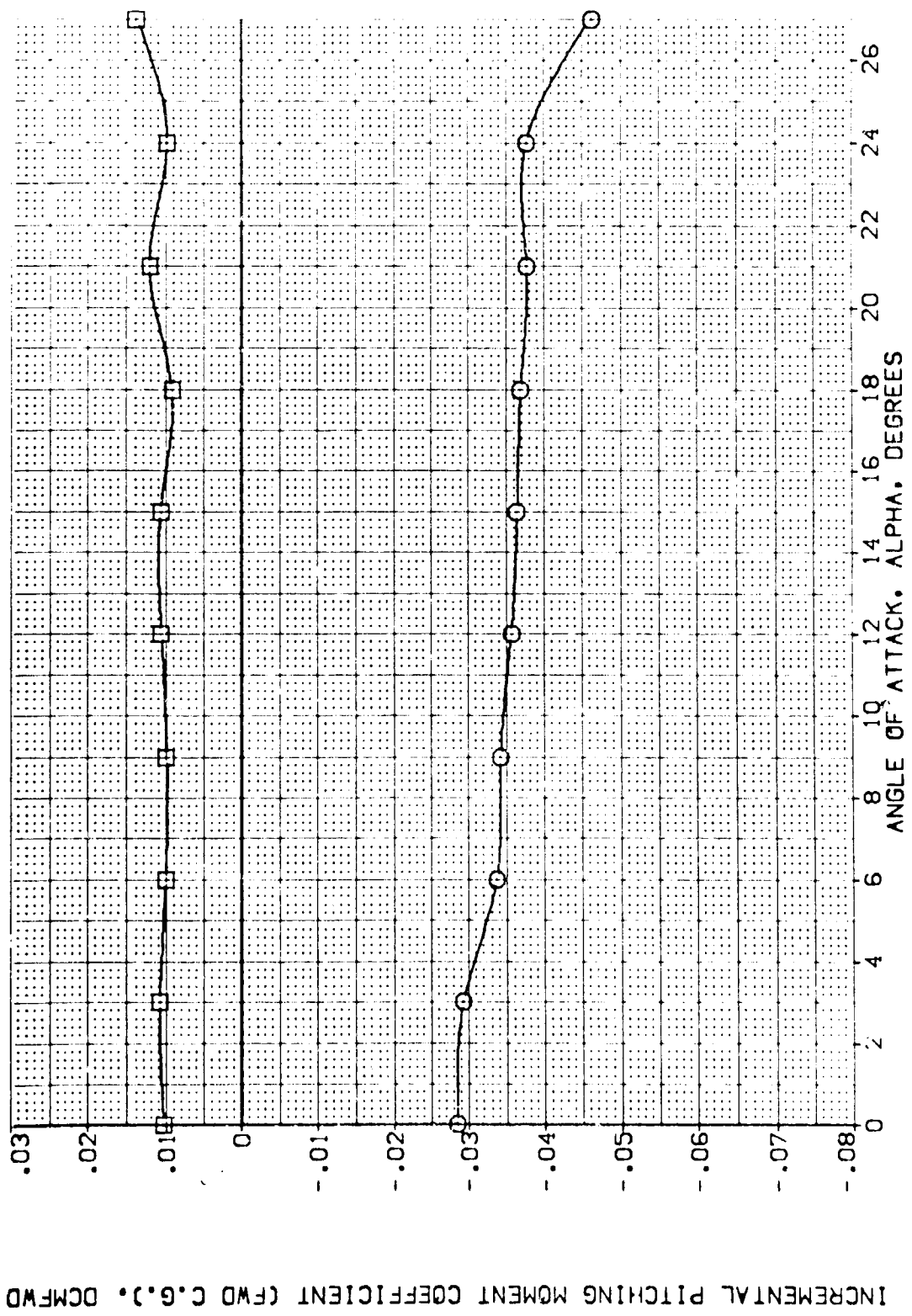


FIG. 8 BODYFLAP EFFECTS

(C)MACH = 1.20

DATA SET SYMBOL		CONFIGURATION DESCRIPTION		ELEVON		AIRLON		DEF		SPDRK		REFERENCE INFORMATION	
[VEJ010]	ARC 11-747	QAS3A	B C M F VI	V	NON	RV/L	.000	.000	16.300	25.000	SREF	2.4210	SQ.FT.
[VEJ011]	ARC 11-747	QAS3A	B C M F VI	V	NON	RV/L	.000	.000	-11.700	25.000	LREF	14.2440	IN.
											BREF	28.1004	IN.
											XMRP	32.3010	IN.
											YMRP	.0000	IN.
											ZMRP	11.2500	IN.
											SCALE	.0300	SCALE

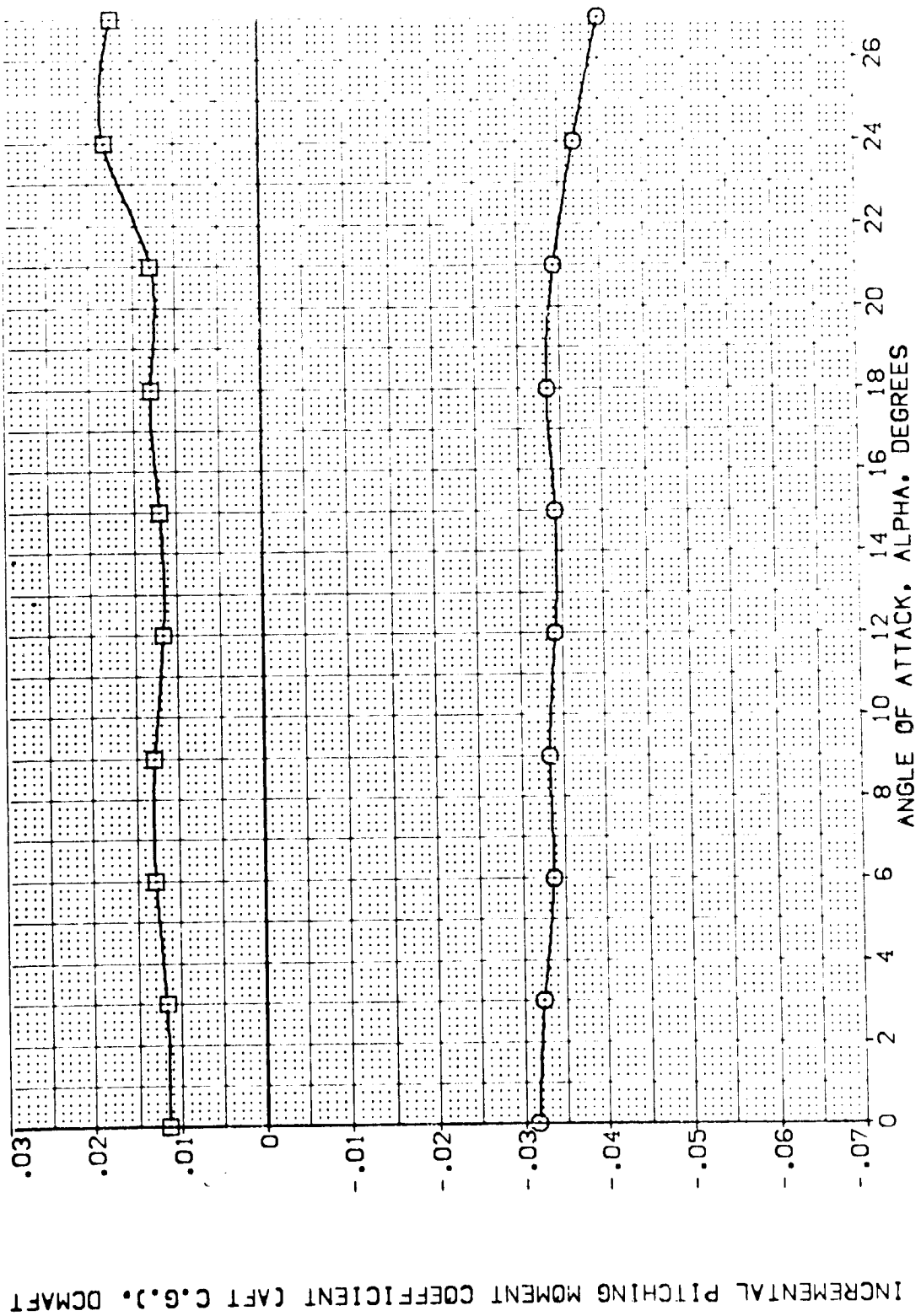


FIG. 8 BODYFLAP EFFECTS

(MACH = .60)



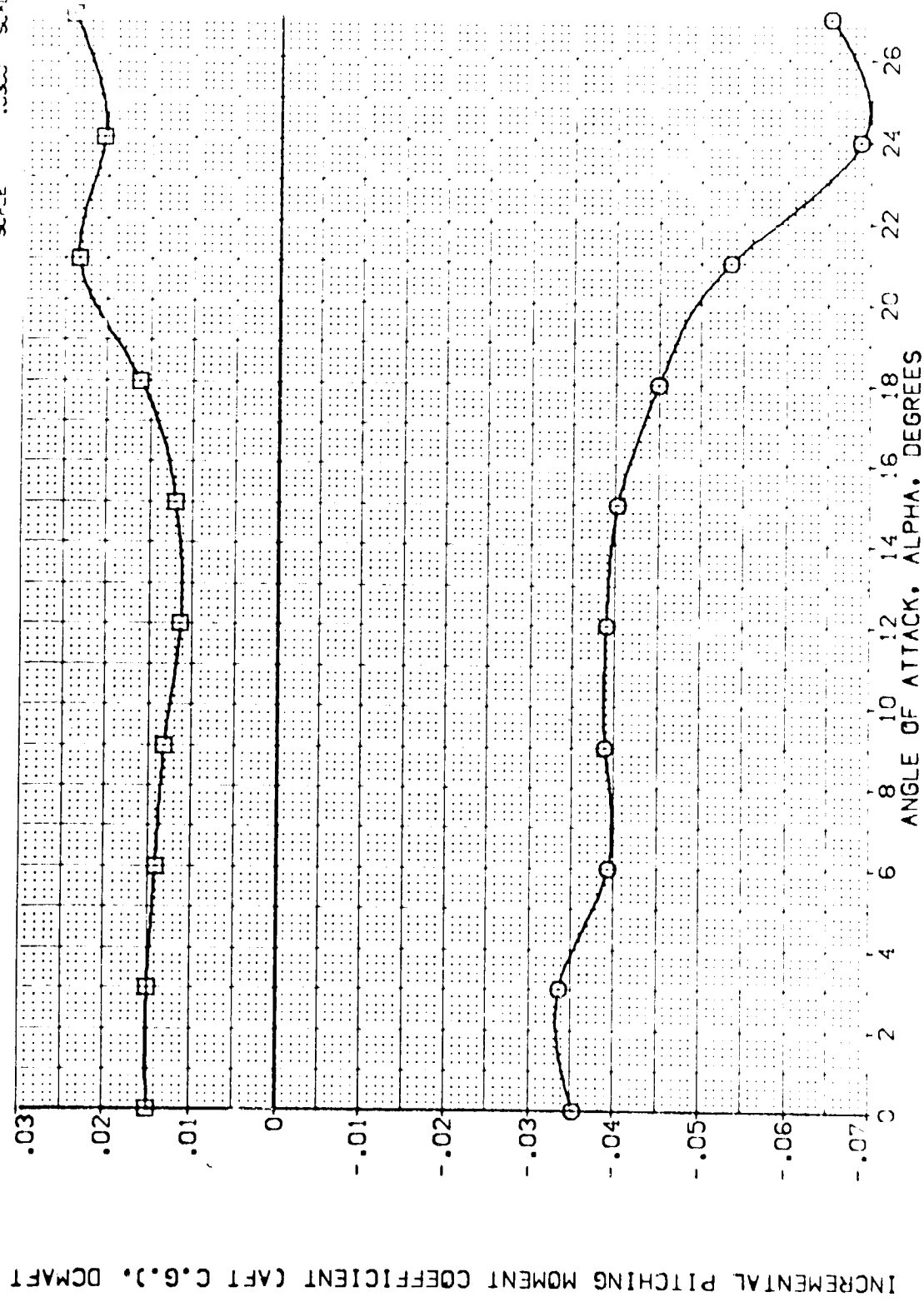




DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 {VEJ010} □ ARC 11-747 DAS3A B C H F V1 V NON- RAVL  
 {VEJ011} □ ARC 11-747 DAS3A B C H F V1 V NON- RAVL

ELEVON AILRON DBF SPOBRK  
 .000 .000 16.300 25.000  
 .000 .000 -11.700 25.000

REFERENCE INFORMATION  
 SREF 2.4210 SQ.FT.  
 LREF 14.2440  
 SREF 28.1004  
 XREF 32.3010  
 YREF .0000  
 ZREF 11.7500  
 SCALE .5300 SCALE



INCREMENTAL PITCHING MOMENT COEFFICIENT (Cm), DCMAFI

FIG. 8 BODYFLAP EFFECTS

(C)MAC = .90



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVATION	AILERON	DBF	SPDBRK	REFERENCE INFORMATION
(VEJ010)	ARC 11-747 B453A B C M F V	.000	.000	16.300	25.000	SREF 2.4210 SC.F.T.
(VEJ011)	ARC 11-747 B453A B C M F V	.000	.000	-11.700	25.000	LREF 14.2440
						BREF 28.0004
						XREF 32.0000
						YREF 0.0000
						ZREF 11.7500
						SCALE .0300

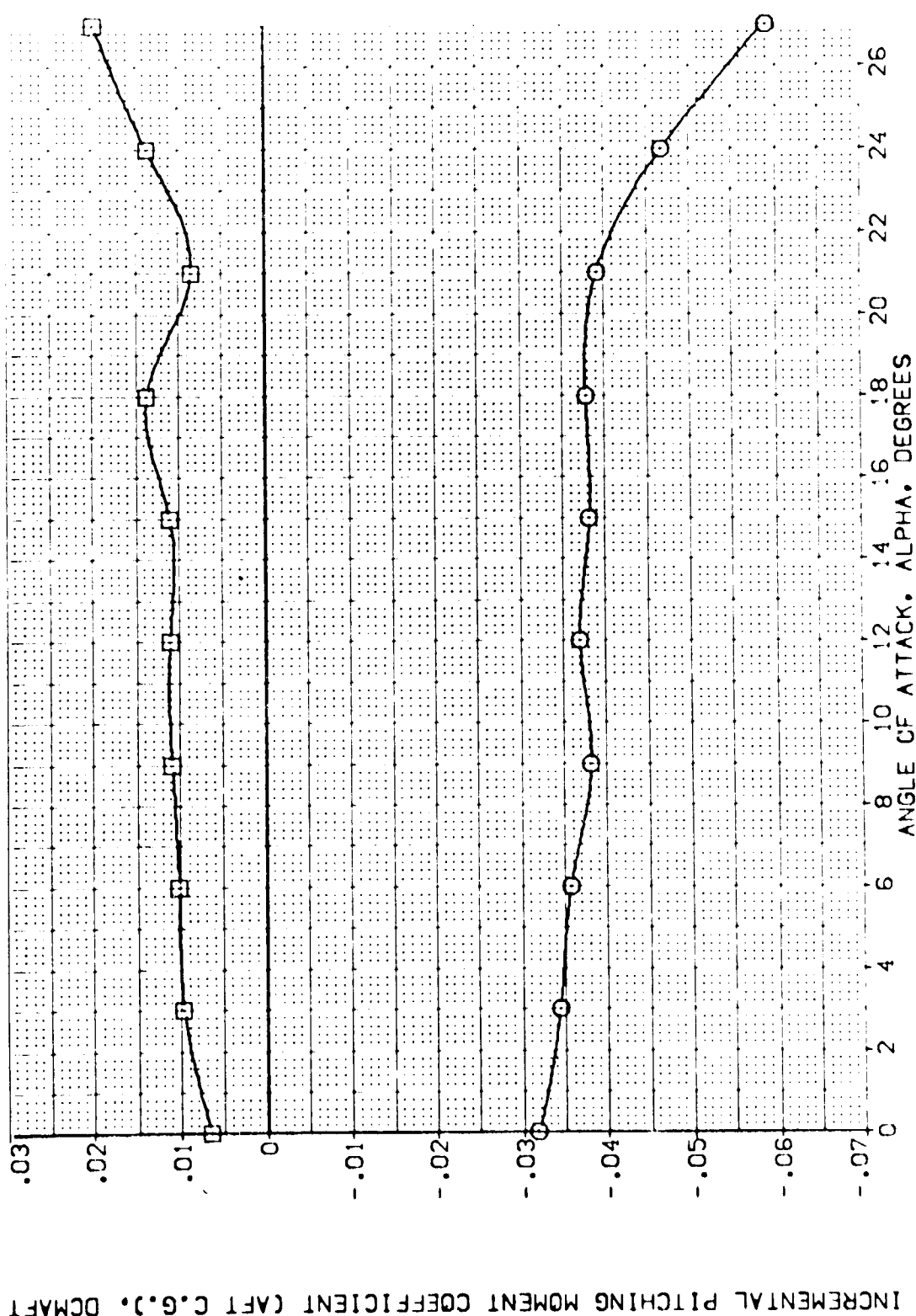


FIG. 8 BODYFLAP EFFECTS

(C)MACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	DBF	SPDBRK	REFERENCE INFORMATION
[VEJ010]	ARC 11-747 OA53A B C H F VI V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
[VEJ011]	ARC 11-747 OA53A B C H F VI V	.000	.000	-11.700	25.000	LREF 14.2440
						BREF 28.0004
						XPRP 32.0010
						YPRP .0000
						ZPRP 11.2500
						SCALE .0300

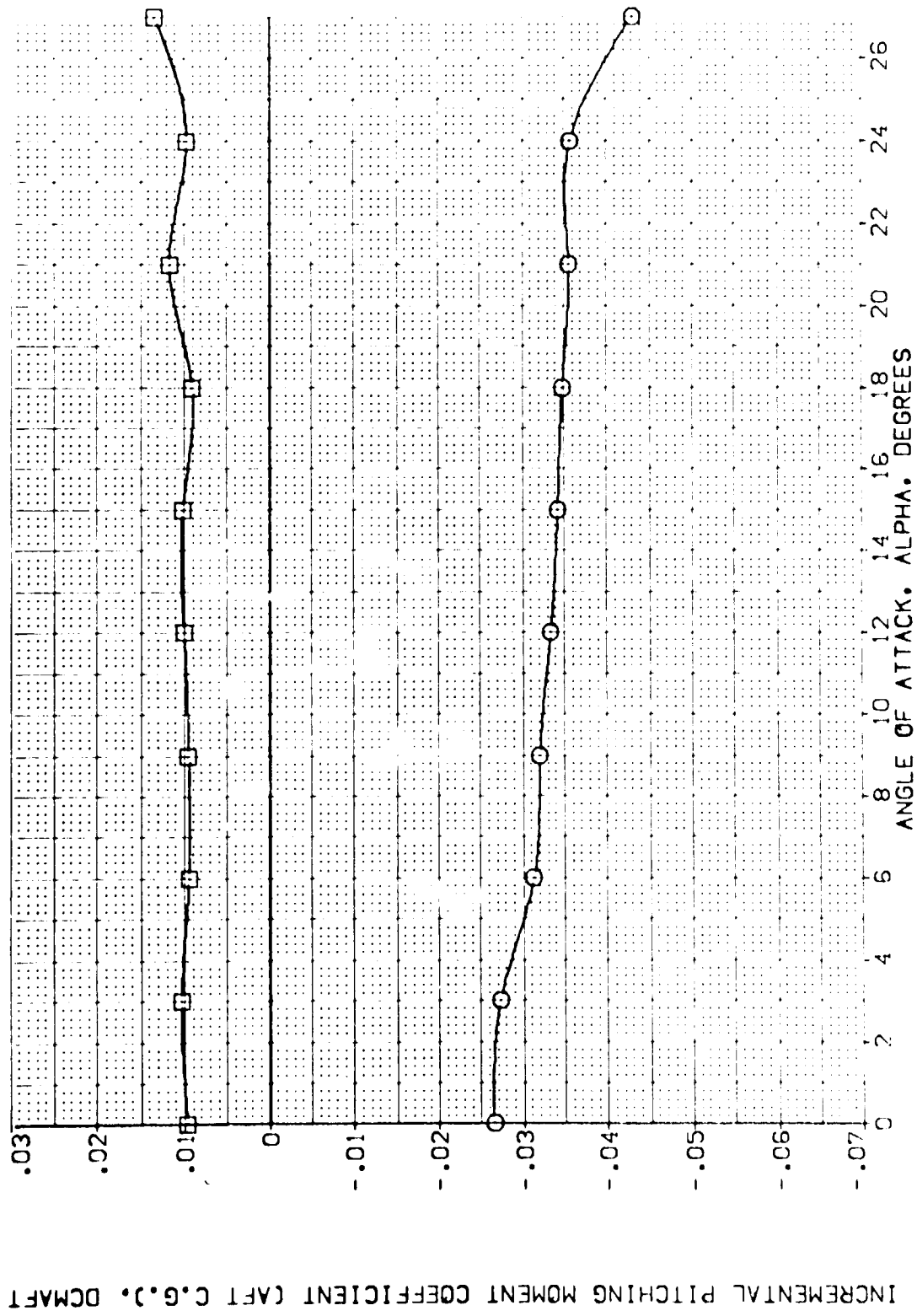


FIG. 8 BODYFLAP EFFECTS

(E)MACH = 1.20



DATA SET SYMBOL		CONFIGURATION DESCRIPTION		ELEVON		AILERON		BODY LAR		SPODBRK		REFERENCE INFORMATION	
[TEJ011]	ARC	11-747	DA53A	B	C	M	F	V				SREF	2.4210
[TEJ024]	ARC	11-747	DA53A	B	C	M	F	V				LPREF	14.2445
[TEJ038]	ARC	11-747	DA53A	B	C	M	F	V				BPREF	28.1004
												YMREF	32.3010
												ZMREF	11.2500
												SCALE	.0300

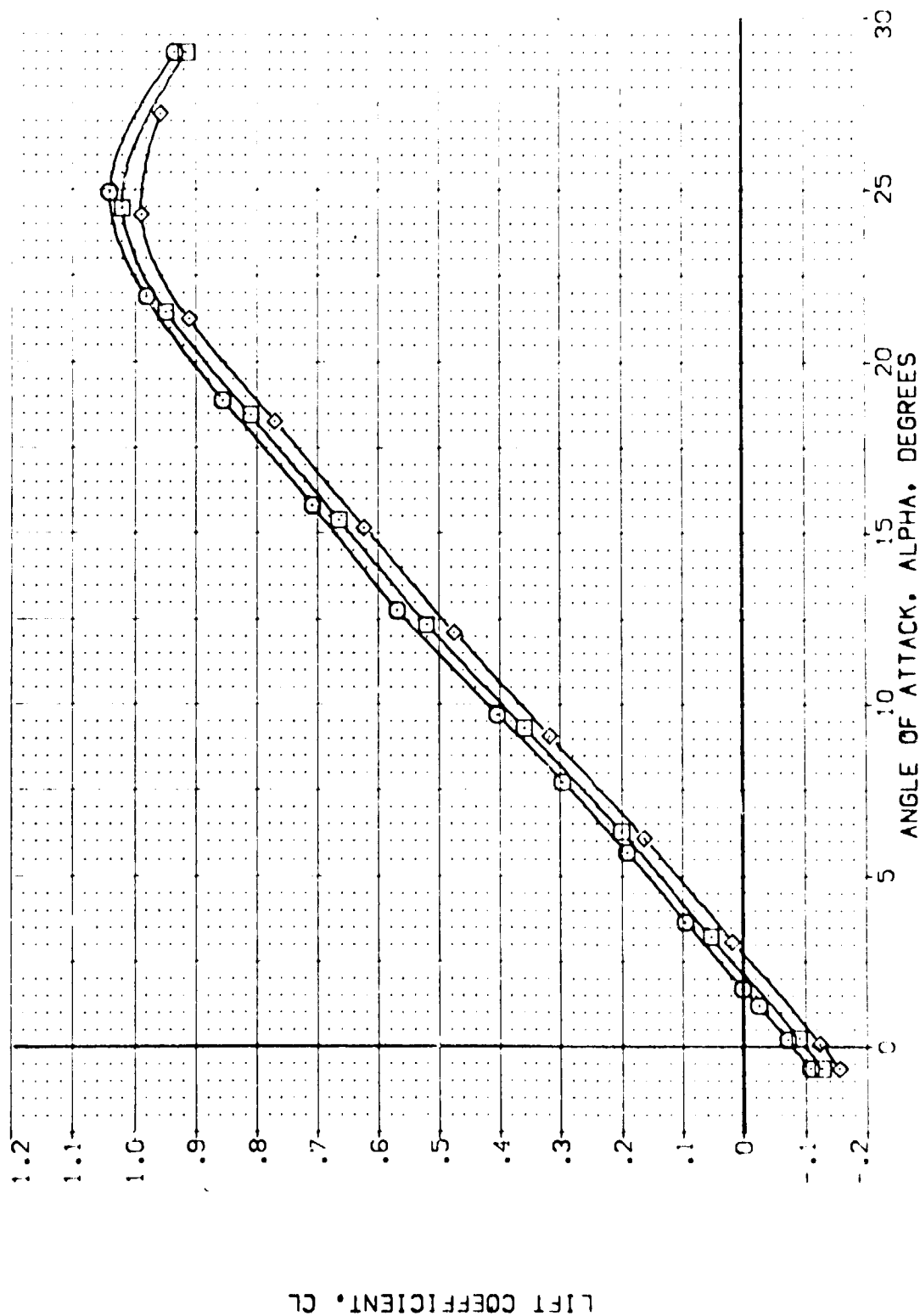


FIG. 9 SPEEDBRAKE EFFECTS

(A) MAC = .60



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPODBRK	REFERENCE INFORMATION
[1EJ011]	ARC 11-747 CAS3A B C H F VI V	.000	.000	-11.700	75.000	SREF 2.4210 SCALE
[1EJ024]	ARC 11-747 CAS3A B C H F VI V	.000	.000	-11.700	55.000	BREF 14.2440
[1EJ038]	ARC 11-747 CAS3A B C H F VI V	.000	.000	-11.700	85.000	BREF 28.1004
						1400 32.3010
						1400 11.2000
						1400 11.2000
						SCALE

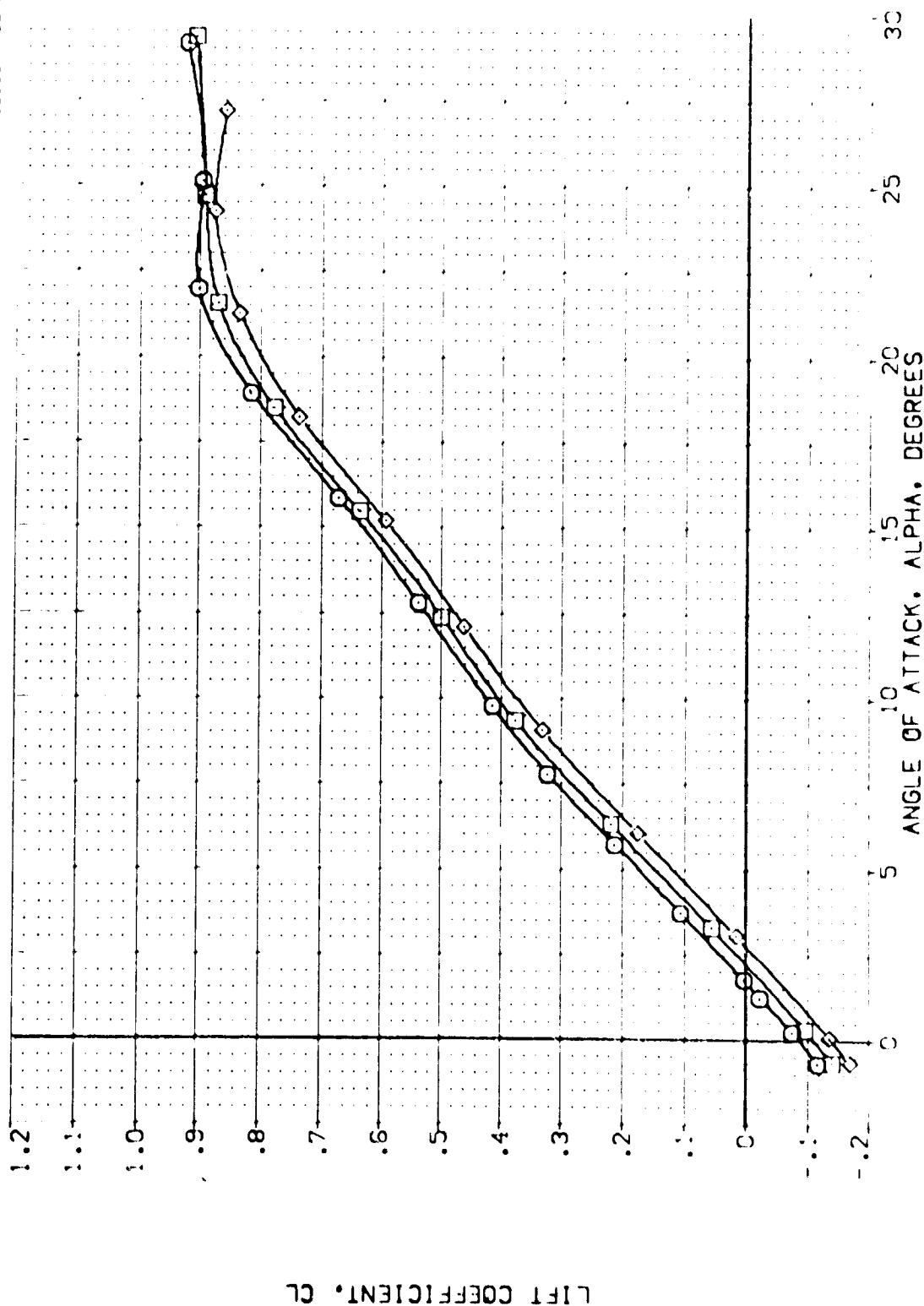


FIG. 9 SPEEDBRAKE EFFECTS

(B)  $M_{AC} = .80$

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPOILER	REFERENCE INFORMATION
(TEJ011)	ARC 11-747 DA53A B C M F V1 V	.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(TEJ024)	ARC 11-747 DA53A B C M F V1 V	.000	.000	-11.700	55.000	LREF 14.2440 IN.
(TEJ038)	ARC 11-747 DA53A B C M F V1 V	.000	.000	-11.700	85.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300 IN.

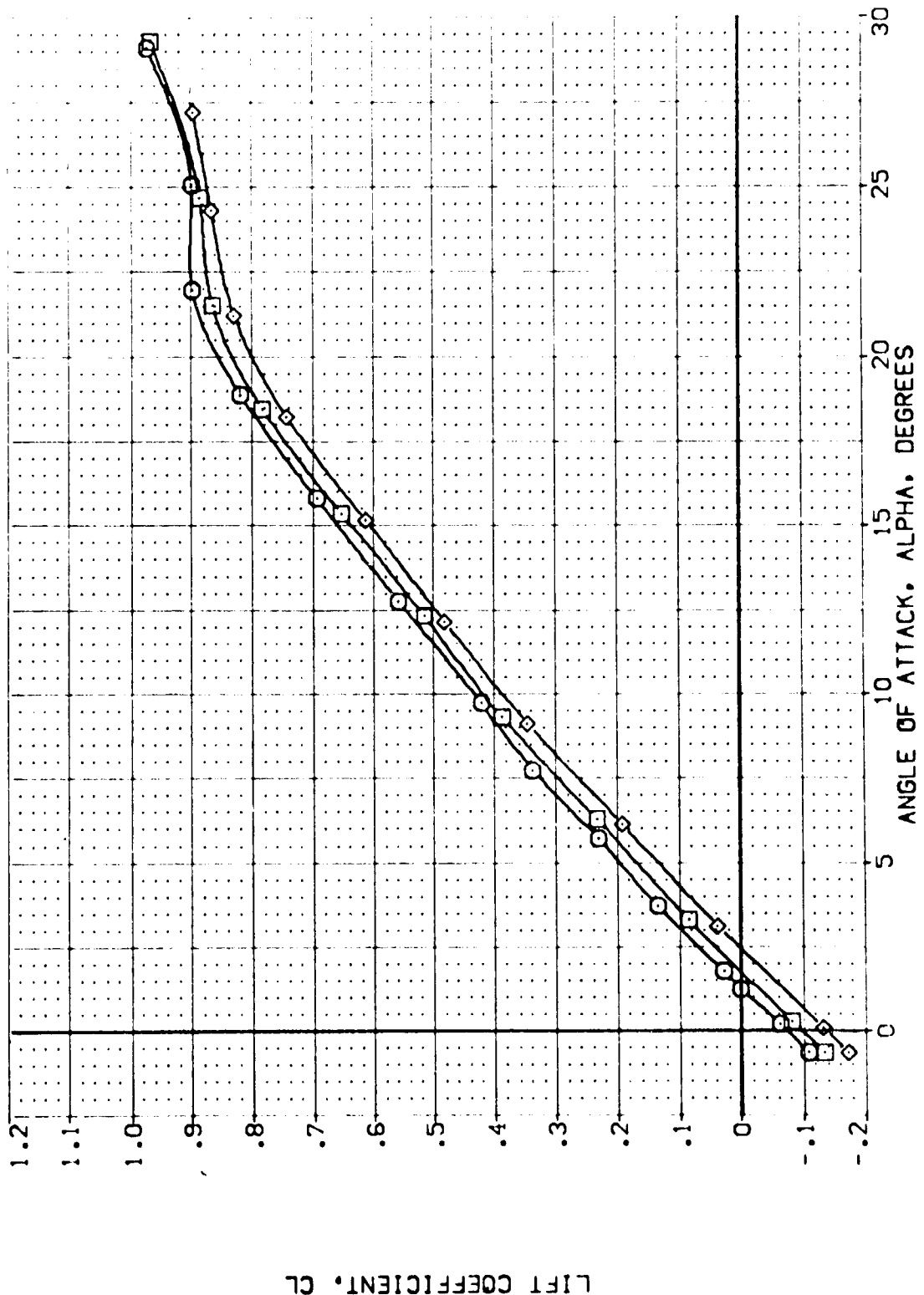


FIG. 9 SPEEDBRAKE EFFECTS

(C)MACH = .90



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVATION	AILLON	BOFLAP	SPODBRK	REFERENCE INFORMATION
(TEJ011)	ARC 11-747 DA53A B C H F V I V	.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(TEJ024)	ARC 11-747 DA53A B C H F V I V	.000	.000	-11.700	55.000	LREF 14.2440 IN.
(TEJ038)	ARC 11-747 DA53A B C H F V I V	.000	.000	-11.700	85.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

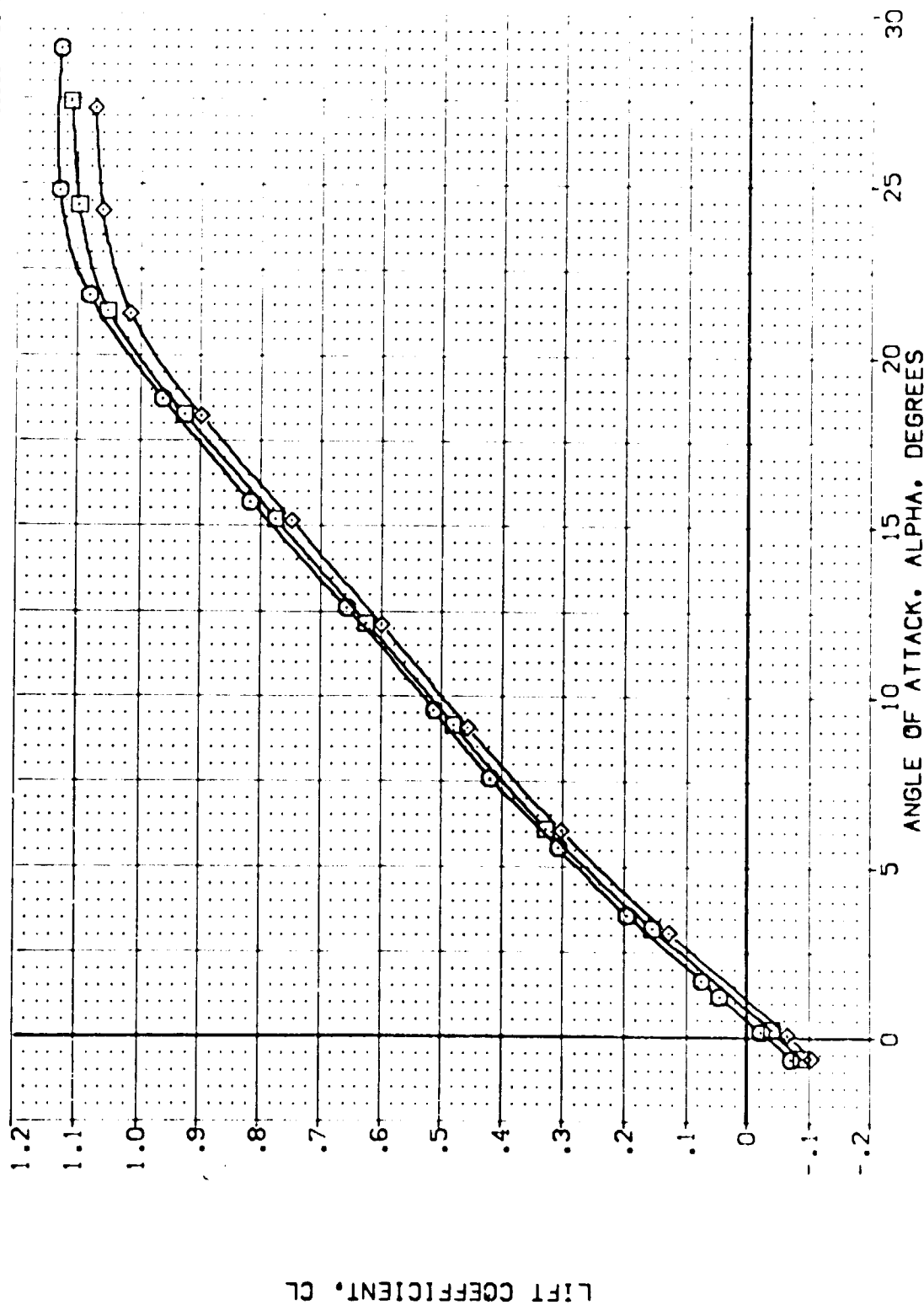


FIG. 9 SPEEDBRAKE EFFECTS

(C)MACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILURON	BOFLAP	SPOBRK	REFERENCE INFORMATION
(TEJ011)	ARC 11-747 DA53A B C H F V1 V	.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(TEJ024)	ARC 11-747 DA53A B C H F V1 V	.000	.000	-11.700	55.000	LREF 14.2440 IN.
(TEJ038)	ARC 11-747 DA53A B C H F V1 V	.000	.000	-11.700	85.000	BREF 28.1004 IN.
						XMRP .0000 IN.
						YMRP .0000 IN.
						ZMRP .0000 IN.
						SCALE 11.2500
						SCALE .0300

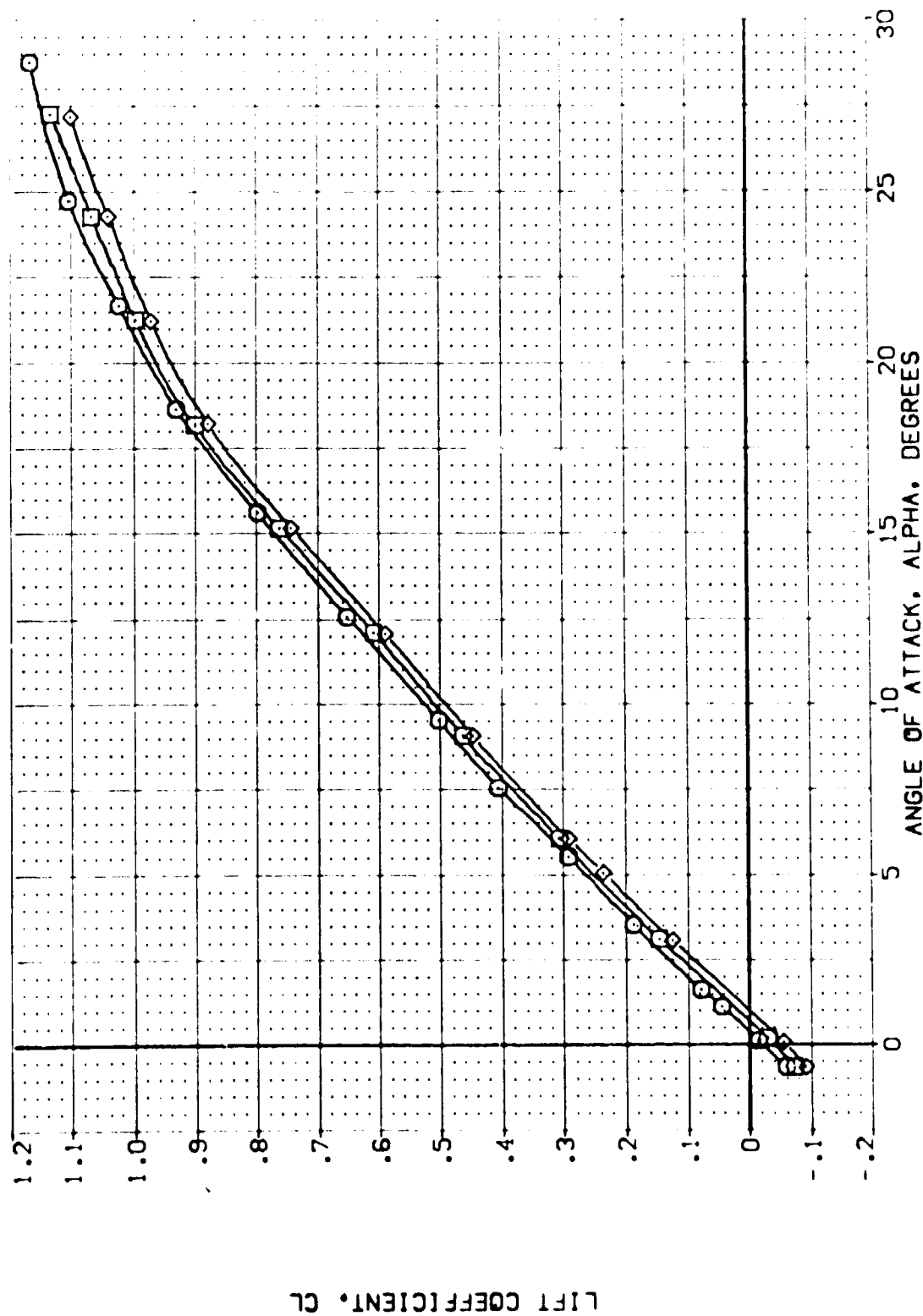


FIG. 9 SPEEDBRAKE EFFECTS

(E)MACH = 1.20



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(1E/011) ARC 11-747 OAS3A B C H F VI V

(1E/024) ARC 11-747 OAS3A B C H F VI V

(1E/038) ARC 11-747 OAS3A B C H F VI V

NOT: RV/L

NOT: RV/L

NOT: RV/L

ELEVON AILRON BOFLAP SPEEDBRK

.000 .000 -11.700 25.000

.000 .000 -11.700 55.000

.000 .000 -11.700 65.000

REFERENCE INFORMATION

SREF 2.4210 SQ.FT.

LREF 14.2440 IN.

BREF 28.1004 IN.

YMRP 32.3010 IN.

ZMRP .0000 IN.

SCALE 11.2500 IN.

SCALE .0300

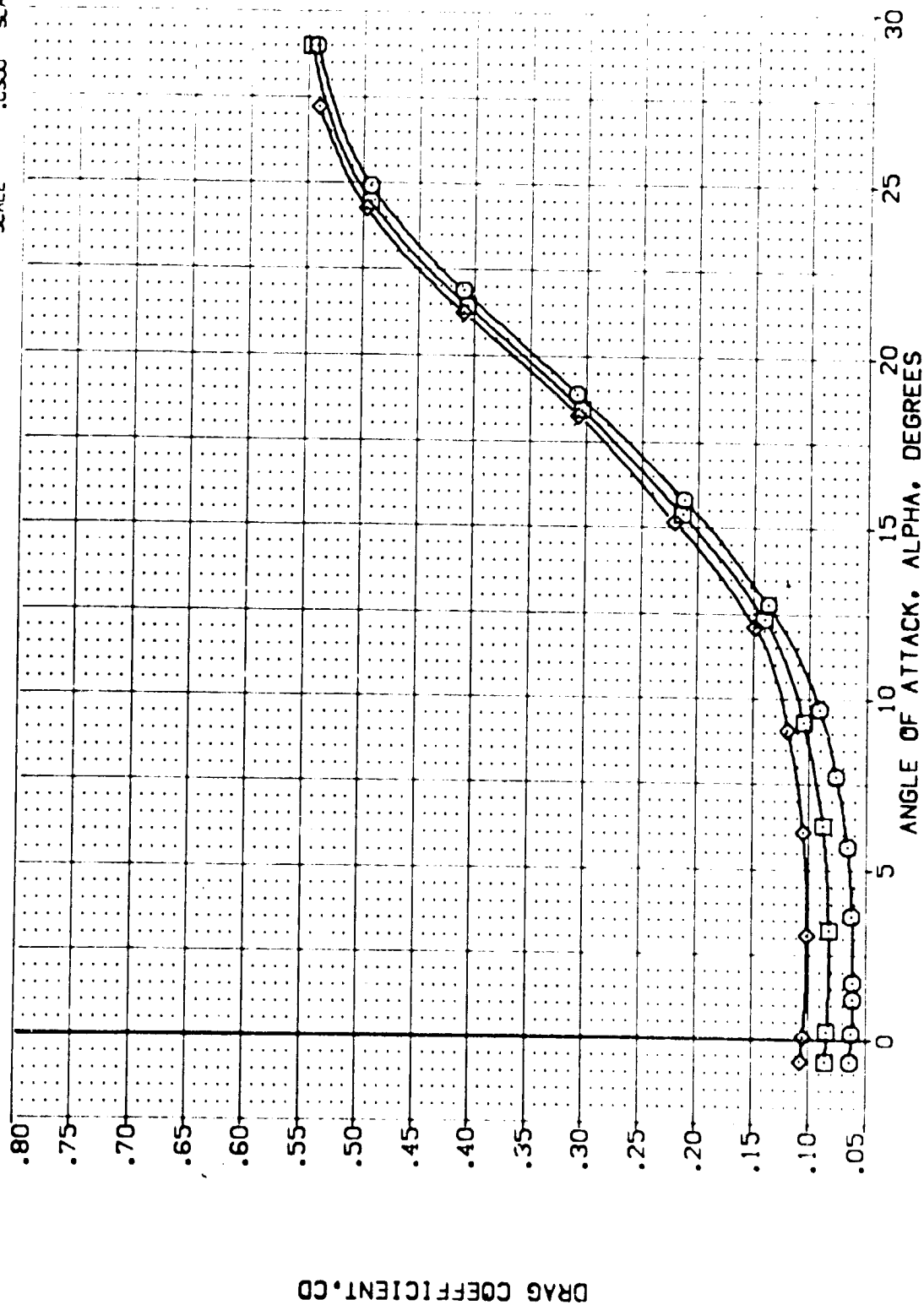


FIG. 9 SPEEDBRAKE EFFECTS

(A)MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPOILER	REFERENCE INFORMATION
(TEJ011)	ARC 11-747 BASSA B C M F VI V	.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(TEJ024)	ARC 11-747 BASSA B C M F VI V	.000	.000	-11.700	55.000	LREF 14.2440 IN.
(TEJ038)	ARC 11-747 BASSA B C M F VI V	.000	.000	-11.700	85.000	BREF 28.1004 IN.
						YREF 32.3010 IN.
						ZREF 11.2300 IN.
						SCALE .0300

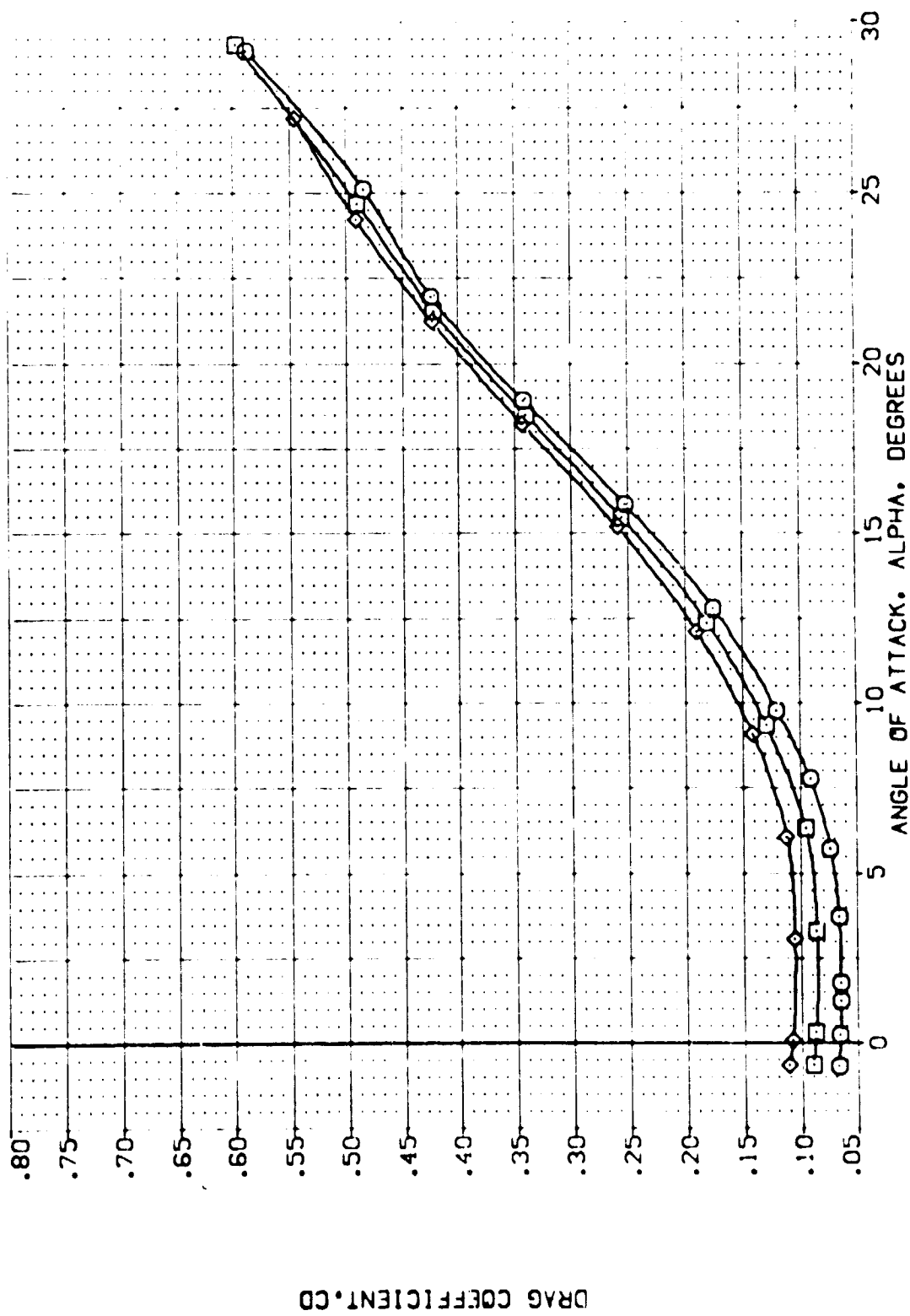


FIG. 9 SPEEDBRAKE EFFECTS

(B) MACH = .80

DATA SET SYMBOL CONFIGURATION DESCRIPTION REFERENCE INFORMATION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPODBRK	SPREF	SC.FT.
[TEJ011]	ARC 11-747 CAS3A B C H F VI V	.000	.000	-11.700	25.000	2.4210	2.4210
[TEJ024]	ARC 11-747 CAS3A B C H F VI V	.000	.000	-11.700	55.000	14.2410	14.2410
[TEJ038]	ARC 11-747 CAS3A B C H F VI V	.000	.000	-11.700	85.000	28.1004	28.1004
						32.3010	32.3010
						0.000	0.000
						11.2500	11.2500
						0.000	0.000
						SCALE	SCALE

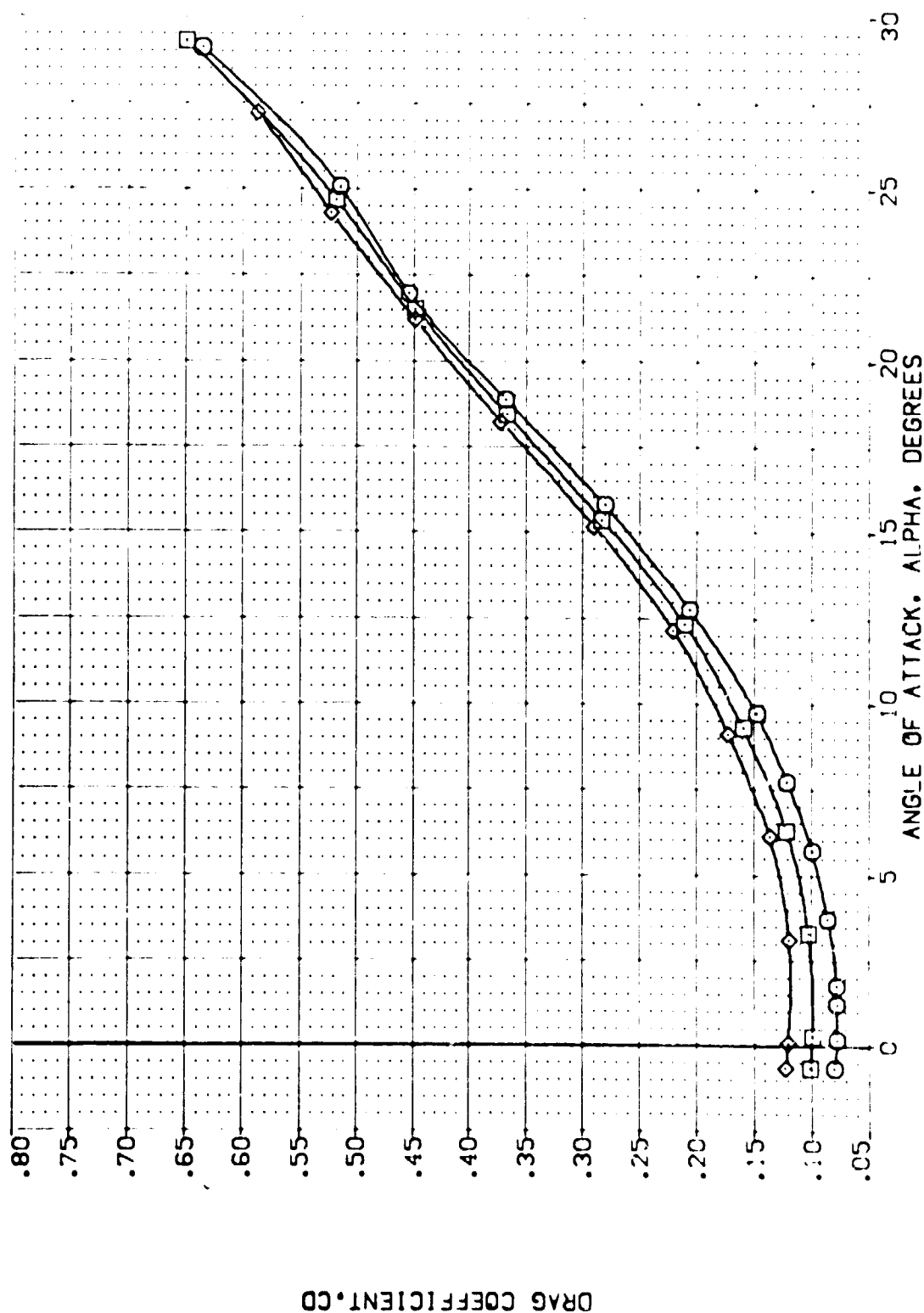


FIG. 9 SPEEDBRAKE EFFECTS

(C)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPODBRK	REFERENCE INFORMATION
(TEJ011)	ARC 11-747 OAS3A B C H F VI V	.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(TEJ024)	ARC 11-747 OAS3A B C H F VI V	.000	.000	-11.700	55.000	LREF 14.2440 IN.
(TEJ038)	ARC 11-747 OAS3A B C H F VI V	.000	.000	-11.700	85.000	BREF 28.1004 IN.
						XMREF 32.3010 IN.
						YMREF .0000 IN.
						ZMREF 11.2500 IN.
						SCALE .0300

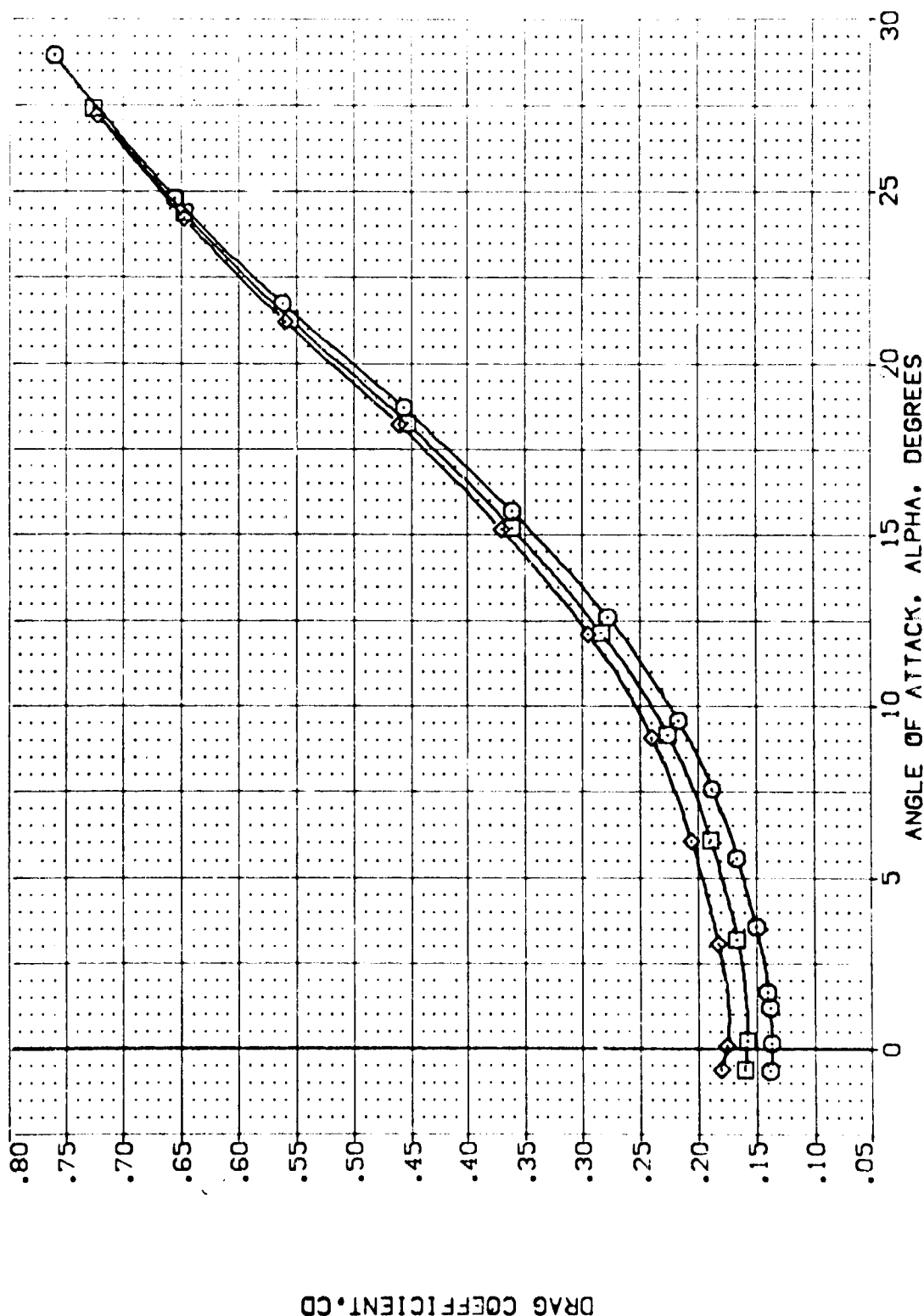


FIG. 9 SPEEDBRAKE EFFECTS

(O)MACH = 1.05

DATA SET SYMBOL    CONFIGURATION DESCRIPTION    ELEVON    AILERON    B/F LAP    SPODBRK    REFERENCE INFORMATION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	B/F LAP	SPODBRK	REFERENCE INFORMATION
[TEJ011]	ARC 11-747 DAS3A B C M F VI V	.000	.000	-11.700	25.000	SREF 2.4210 SQ.F.T.
[TEJ024]	ARC 11-747 DAS3A B C M F VI V	.000	.000	-11.700	55.000	LREF 14.2440 IN.
[TEJ038]	ARC 11-747 DAS3A B C M F VI V	.000	.000	-11.700	85.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP 11.0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300 SCALE

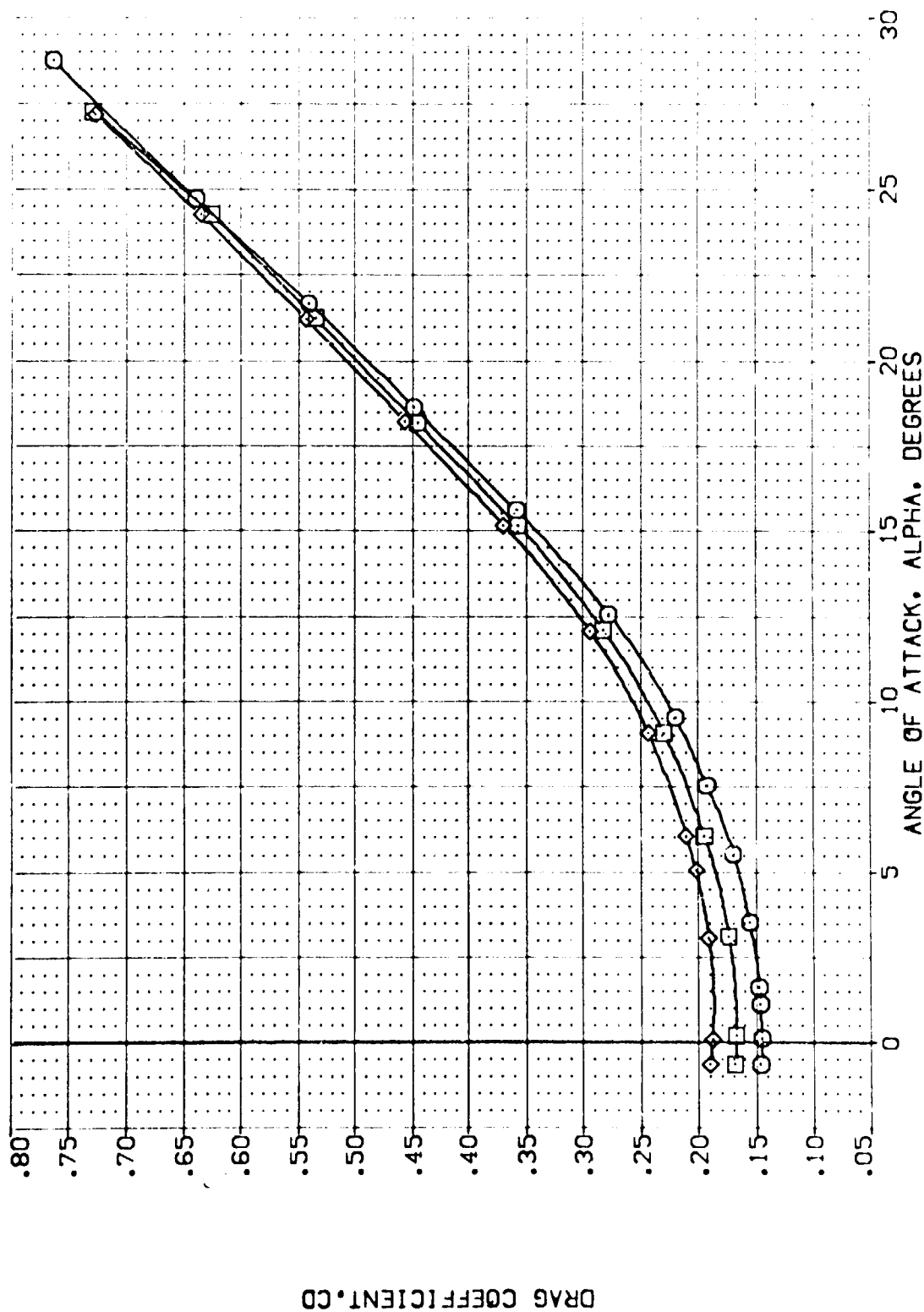


FIG. 9 SPEEDBRAKE EFFECTS

(E)MACH = 1.20



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPOBRK	REFERENCE INFORMATION
(TEJ011)	ARC 11-747 DAS3A B C H F VI V	.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(TEJ024)	ARC 11-747 DAS3A B C H F VI V	.000	.000	-11.700	55.000	LREF 14.2440 IN.
(TEJ038)	ARC 11-747 DAS3A B C H F VI V	.000	.000	-11.700	85.000	BREF 28.1004 IN.
						VMRP 32.3010 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

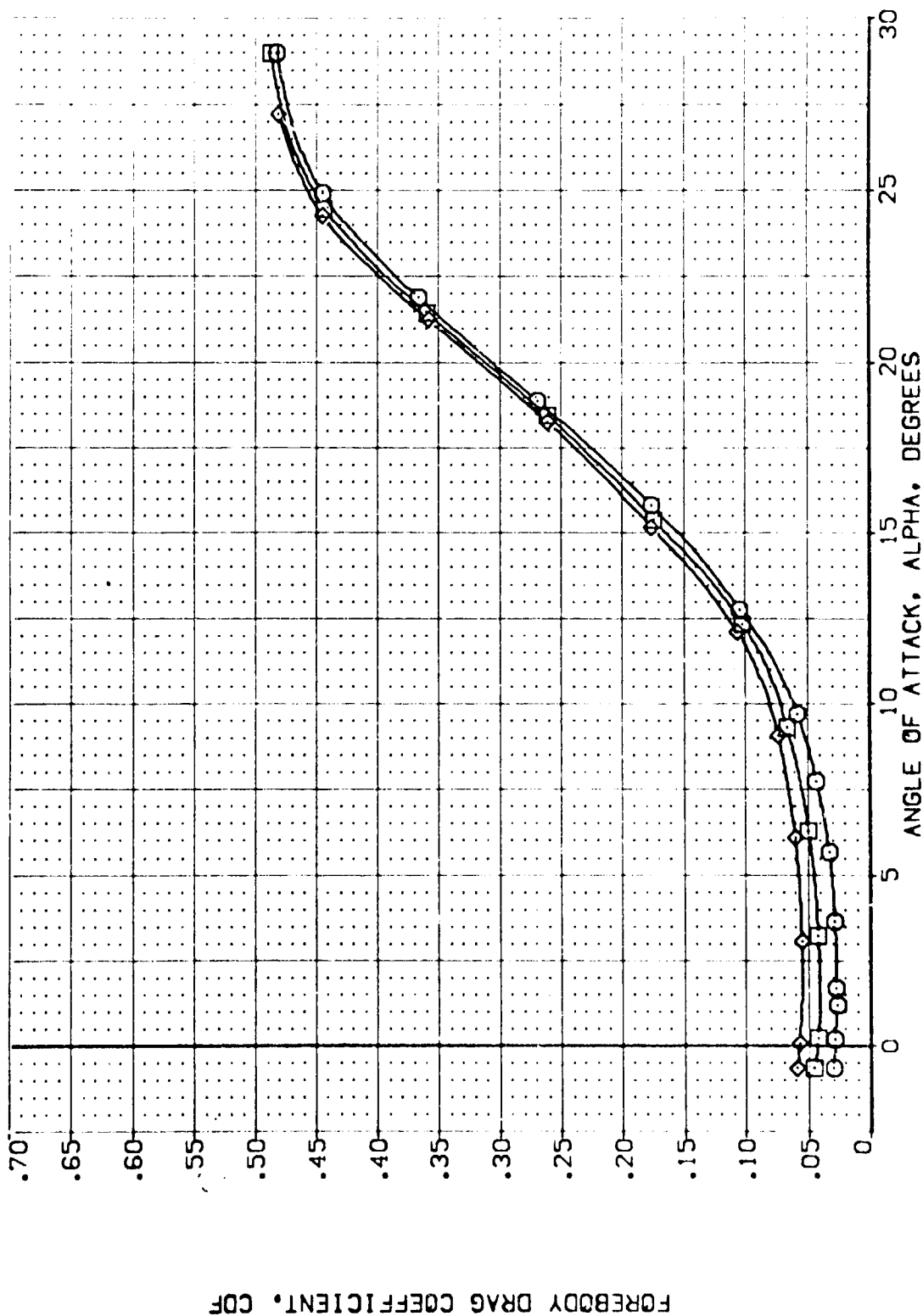


FIG. 9 SPEEDBRAKE EFFECTS

(M)MACH = .60



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVATION	AIRLIFT	BDF LAP	SPEED	REFERENCE INFORMATION
(TEJ011)	ARC 11-747 DA53A B C M F V1 V	.000	.000	-11.700	75.000	SREF 2.4210 50.17
(TEJ024)	ARC 11-747 DA53A B C M F V1 V	.000	.000	-11.700	55.000	LREF 14.440
(TEJ038)	ARC 11-747 DA53A B C M F V1 V	.000	.000	-11.700	65.000	BREF 28.1004
						XMRP 32.3010
						YMRP .0000
						ZMRP 11.27500
						SCALE .0300

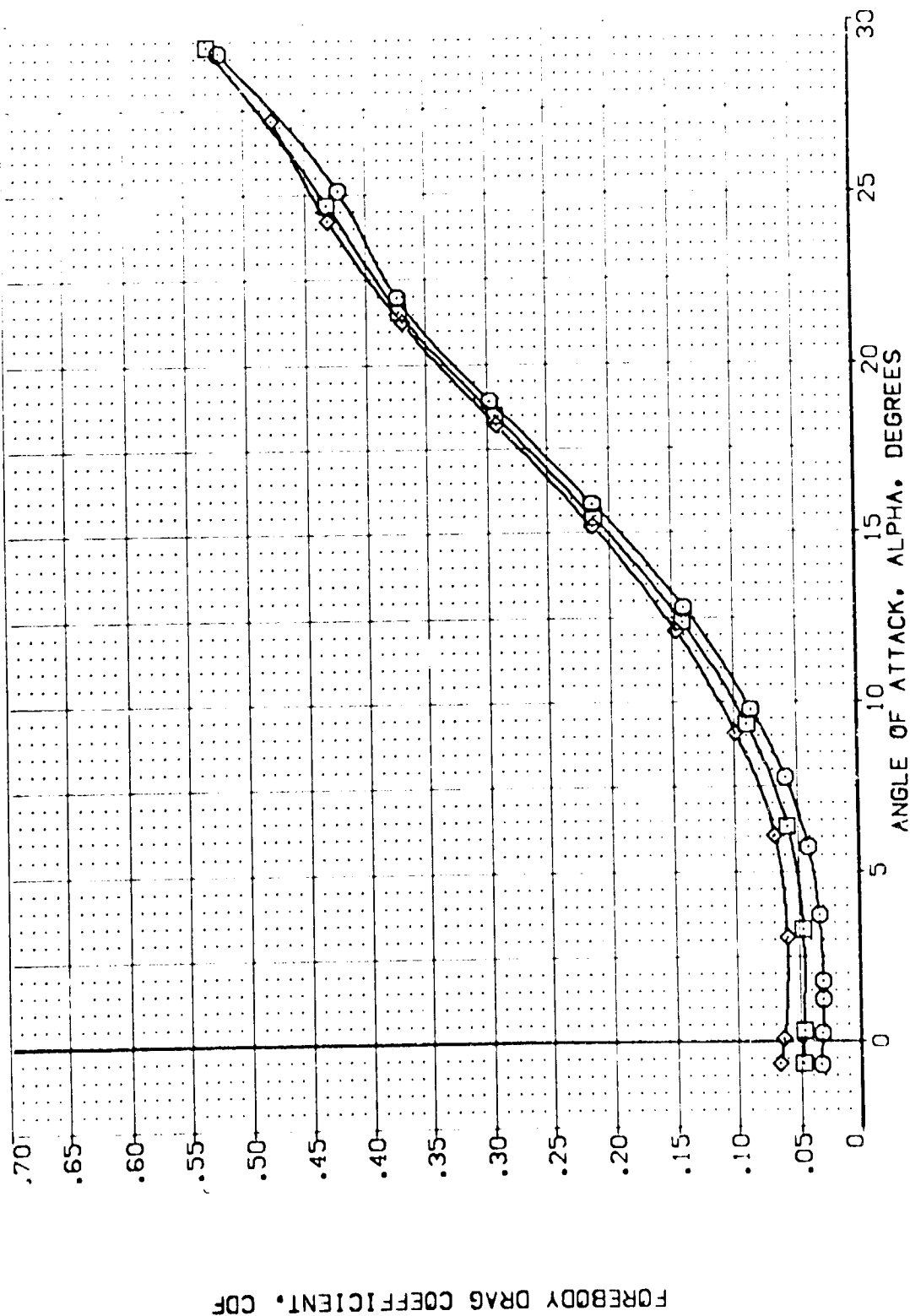


FIG. 9 SPEEDBRAKE EFFECTS

(B)MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILLON	BOFLAP	SPOBRK	REFERENCE INFORMATION
{TEJ011}	ARC 11-747 BA53A B C M F VI V	.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
{TEJ024}	ARC 11-747 BA53A B C M F VI V	.000	.000	-11.700	55.000	LREF 14.2440 IN.
{TEJ038}	ARC 11-747 BA53A B C M F VI V	.000	.000	-11.700	85.000	BREF 28.1004 IN.
						YMRP 32.3010 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

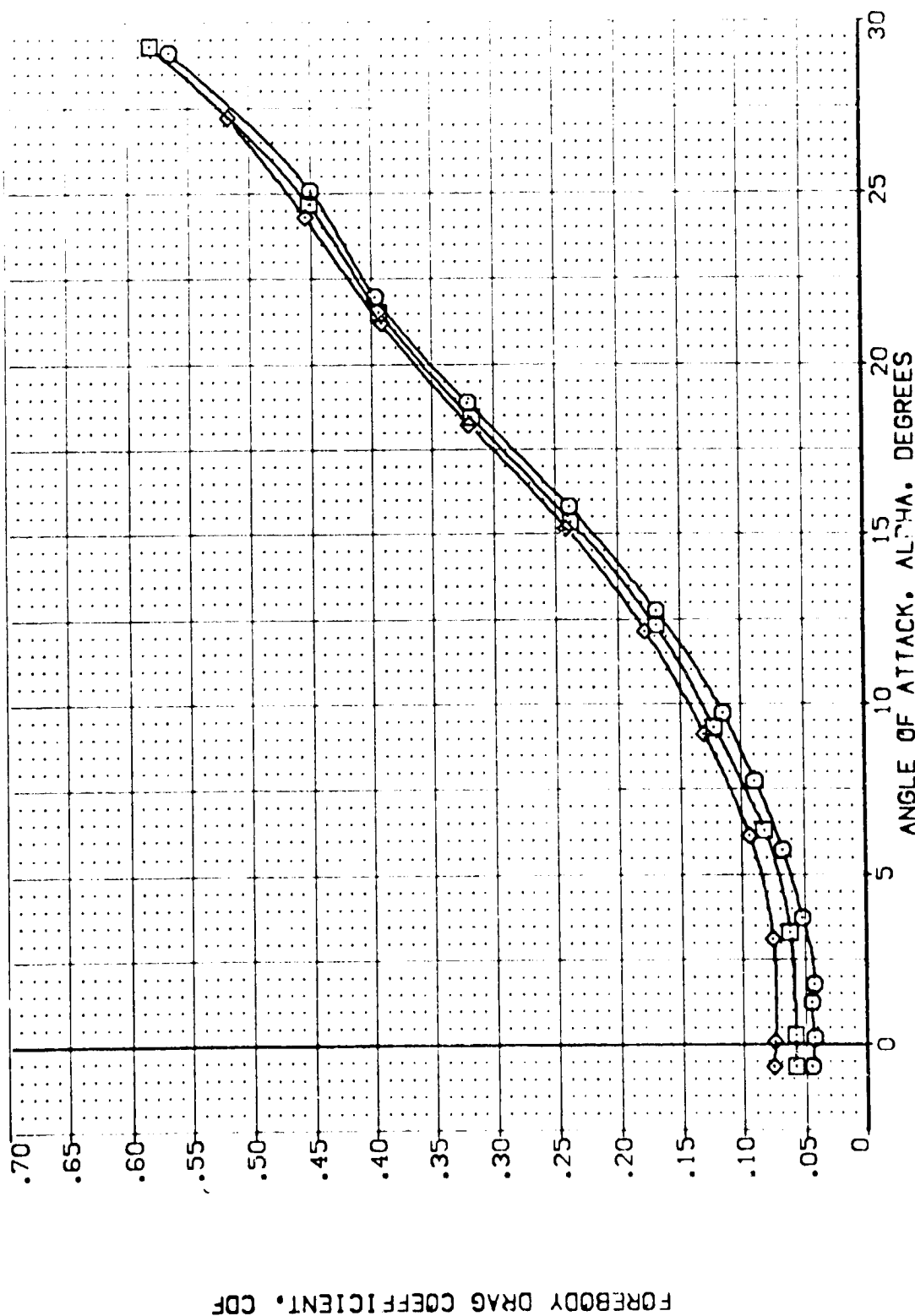


FIG. 9 SPEEDBRAKE EFFECTS

(C)MACH = .90





DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BDF LAP	SPDRBK	REFERENCE INFORMATION
(TEJ011)	ARC 11-747 BASSA B C M F VI V	.000	.000	-11.700	75.000	SREF 2.4210 SQ.FT.
(TEJ024)	ARC 11-747 BASSA B C M F VI V	.000	.000	-11.700	55.000	LREF 14.2440
(TEJ038)	ARC 11-747 BASSA B C M F VI V	.000	.000	-11.700	85.000	BREF 28.1004
						XMRP 32.3010
						YMRP .0000
						ZMRP .0000
						SCALE 11.2500
						SCALE .0300

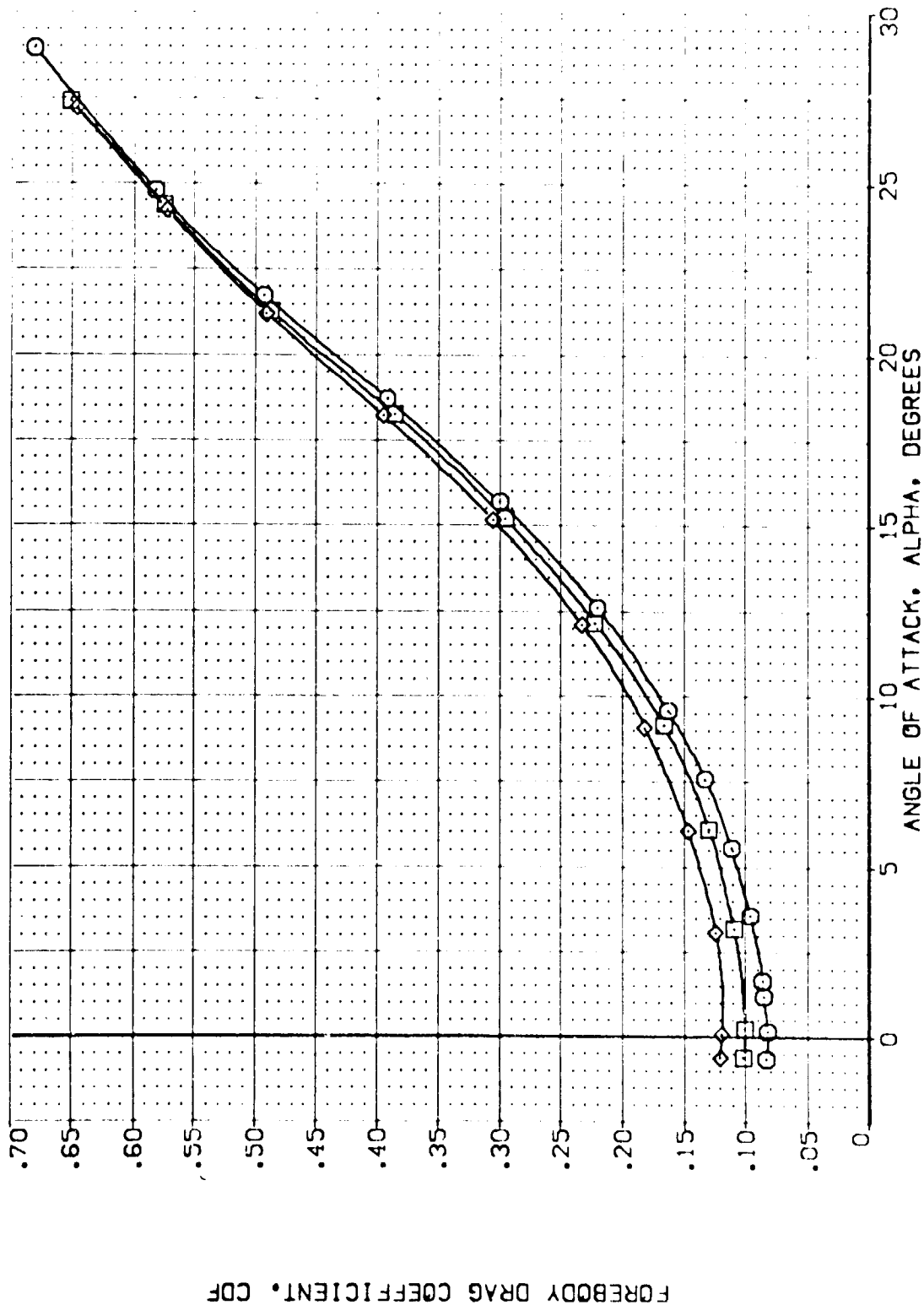


FIG. 9 SPEEDBRAKE EFFECTS

(D)MACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVATION	ALTRON	BDELTA	SPOBRK	REFERENCE INFORMATION
(TEJ011)	ARC 11-747 CAS3A B C M F VI V	.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(TEJ024)	ARC 11-747 CAS3A B C M F VI V	.000	.000	-11.700	55.000	LREF 14.2440
(TEJ038)	ARC 11-747 CAS3A B C M F VI V	.000	.000	-11.700	65.000	BREF 28.1004
						YREF 32.3010
						ZREF .0000
						SCALE 11.2500
						SCALE 10.000

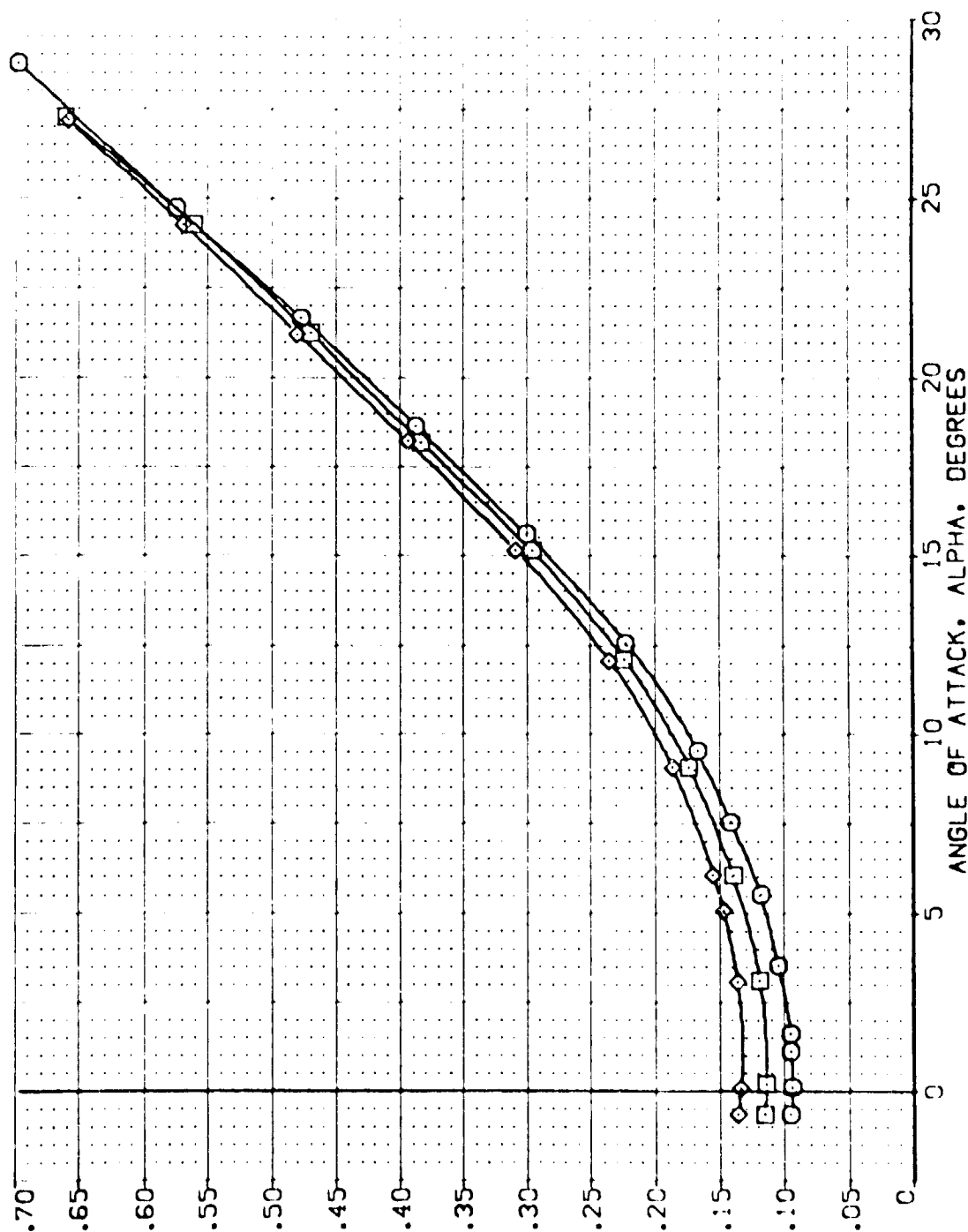


FIG. 9 SPEEDBRAKE EFFECTS

(CD)MACH = 1.20



DATA SET SYMBOL    CONFIGURATION DESCRIPTION    ELEVON    AIRBORN    BOFLAP    SPEEDBRAK    REFERENCE INFORMATION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AIRBORN	BOFLAP	SPEEDBRAK	REFERENCE INFORMATION
(TEJ011)	ARC 11-747 DA53A B C M F V1 V	.000	.000	-11.700	25.000	SREF 2.4210 SC.FY.
(TEJ024)	ARC 11-747 DA53A B C M F V1 V	.000	.000	-11.700	55.000	LREF 14.2440
(TEJ038)	ARC 11-747 DA53A B C M F V1 V	.000	.000	-11.700	85.000	BREF 28.000
						AREF 32.000
						ZAREF 11.27500
						SCALE .0300

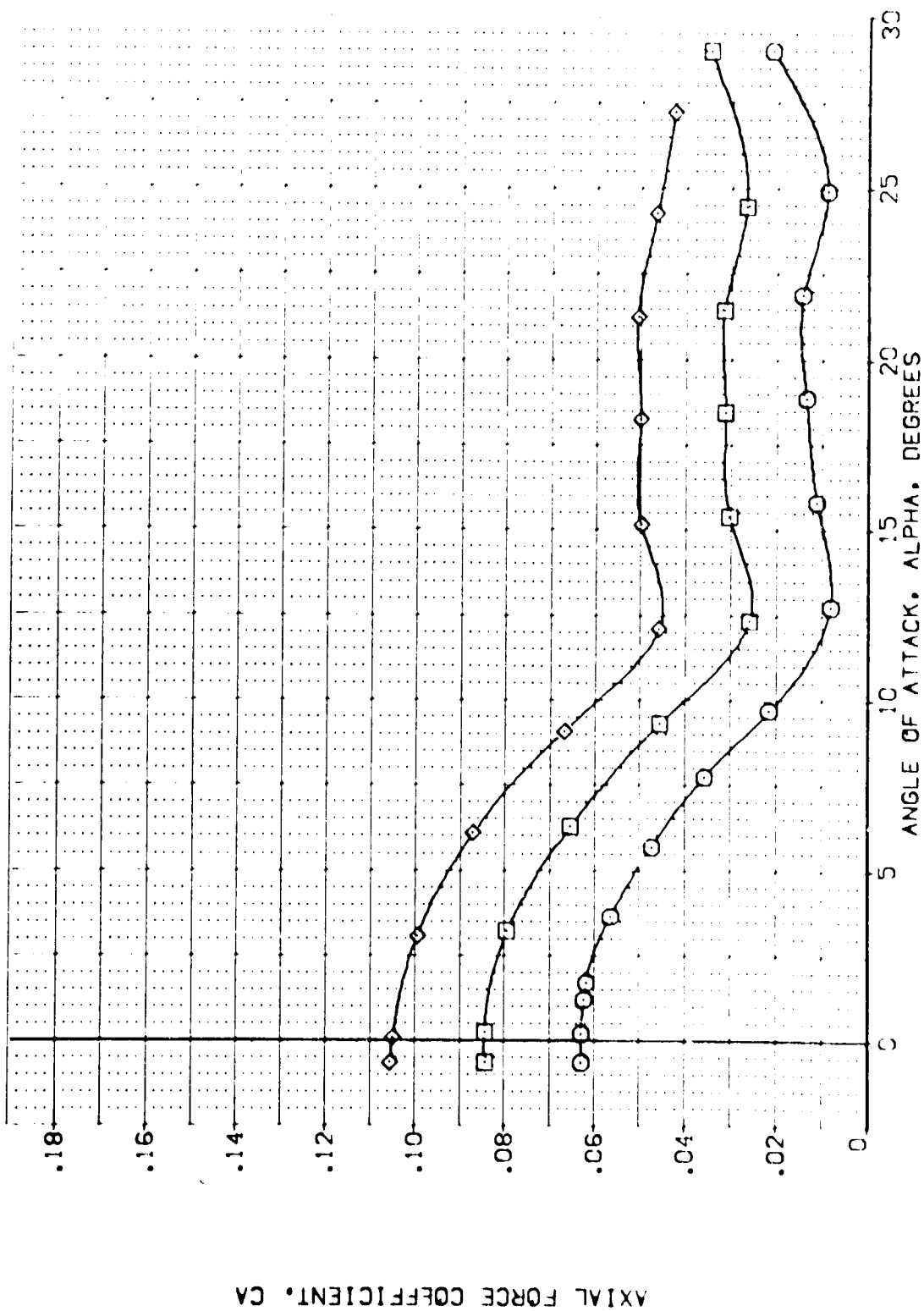


FIG. 9 SPEEDBRAKE EFFECTS

MAC = .60



DATA SET SYMBOL    CONFIGURATION DESCRIPTION

TEJ0111    ARC 11-747 DAS3A B C H F VI V    NON: RV/L

TEJ024    ARC 11-747 DAS3A B C H F VI V    NON: RV/L

TEJ038    ARC 11-747 DAS3A B C H F VI V    NON: RV/L

ELEVON    AILERON    BOFLAP    SPEEDBRK

.000    .000    -11.700    75.000

.000    .000    -11.700    55.000

.000    .000    -11.700    85.000

REFERENCE INFORMATION

SREF    2.4210    50.0 FT.

LRREF    14.2440    IN.

BRREF    28.1004    IN.

XMRP    32.3010    IN.

YMRP    .0000    IN.

ZMRP    11.2500    IN.

SCALE    .0300

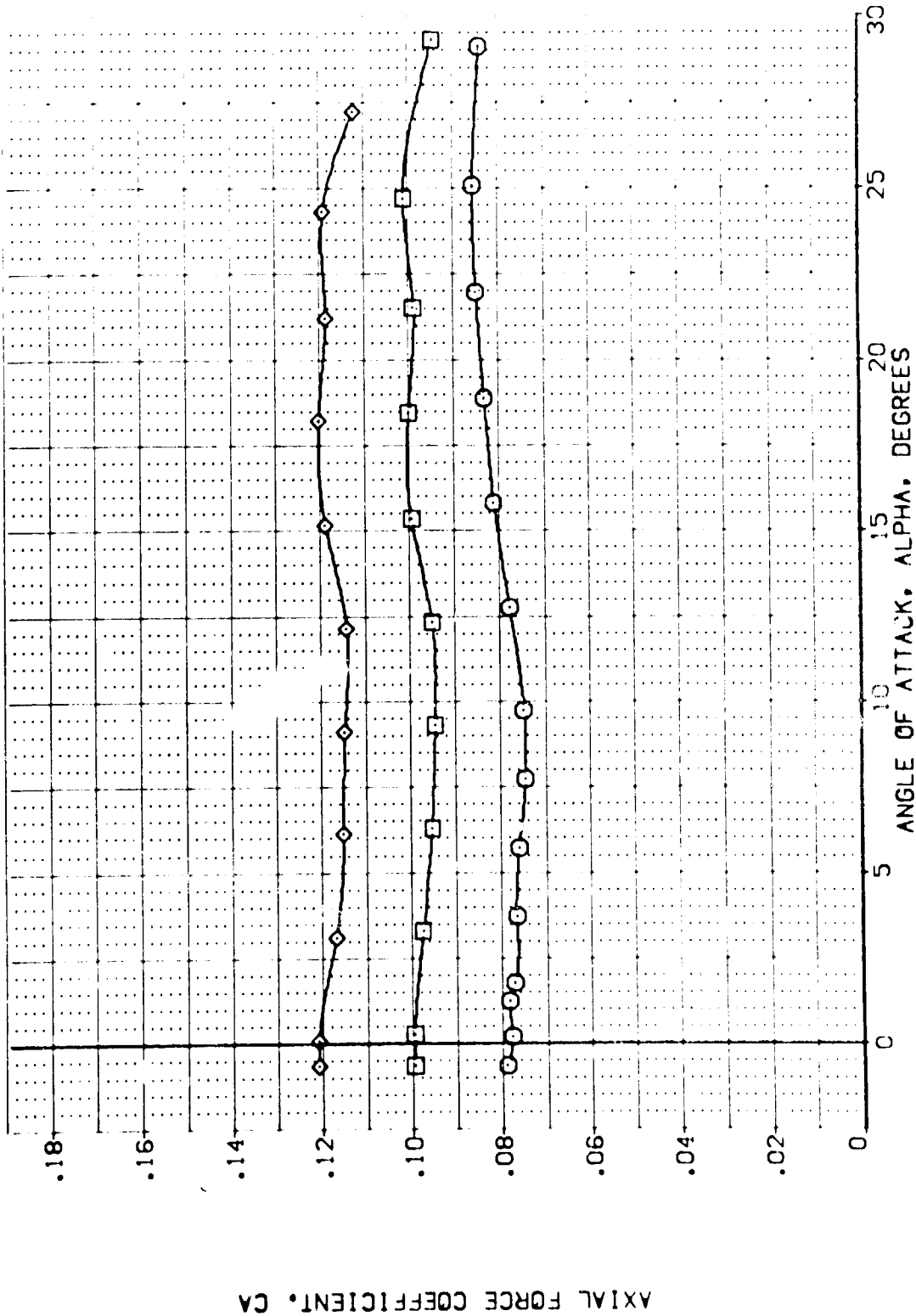


FIG. 9 SPEEDBRAKE EFFECTS

(C)MACH = .90



DATA SET SYMBOL    CONFIGURATION DESCRIPTION    ELEVON    AILERON    BDF LAP    SPEEDBRAK    REFERENCE INFORMATION

(TEJ011)	ARC 11-747 DAS3A B C M F VI V	.000	.000	-11.700	25.000	SREF 2.4210
(TEJ024)	ARC 11-747 DAS3A B C M F VI V	.000	.000	-11.700	55.000	LREF 14.2440
(TEJ038)	ARC 11-747 DAS3A B C M F VI V	.000	.000	-11.700	85.000	BREF 28.1004
						XMRP 32.3010
						YMRP .0000
						ZMRP 11.2500
						SCALE .0300

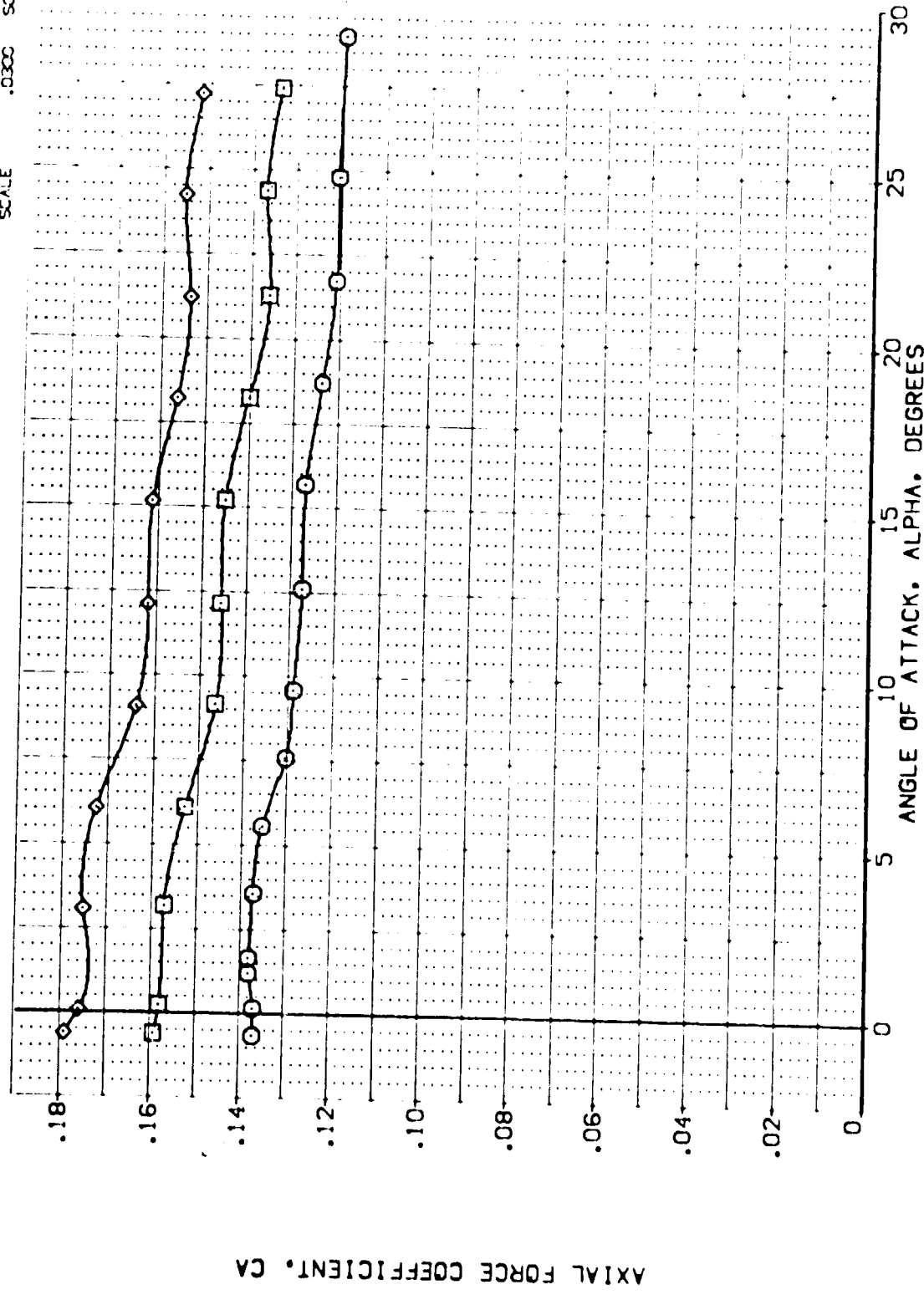


FIG. 9 SPEEDBRAKE EFFECTS

(C)MACH = 1.05

# DATA SET SYMBOL

[TEJ011]  
[TEJ024]  
[TEJ038]

# CONFIGURATION DESCRIPTION

ARC 11-747 DAS3A B C M F VI V  
ARC 11-747 DAS3A B C M F VI V  
ARC 11-747 DAS3A B C M F VI V

NOM. RV/L  
NOM. RV/L  
NOM. RV/L

ELEVON  
.000  
.000  
.000

AILERON  
.000  
.000  
.000

BOFLAP  
-11.700  
-11.700  
-11.700

SPEEDBRK  
25.000  
55.000  
65.000

REFERENCE INFORMATION  
SREF 2.4210 SQ.FT.  
LREF 14.2440  
BREF 28.1004  
X-MRP 32.3010  
Y-MRP 0.0000  
Z-MRP 11.2500  
SCALE .0300

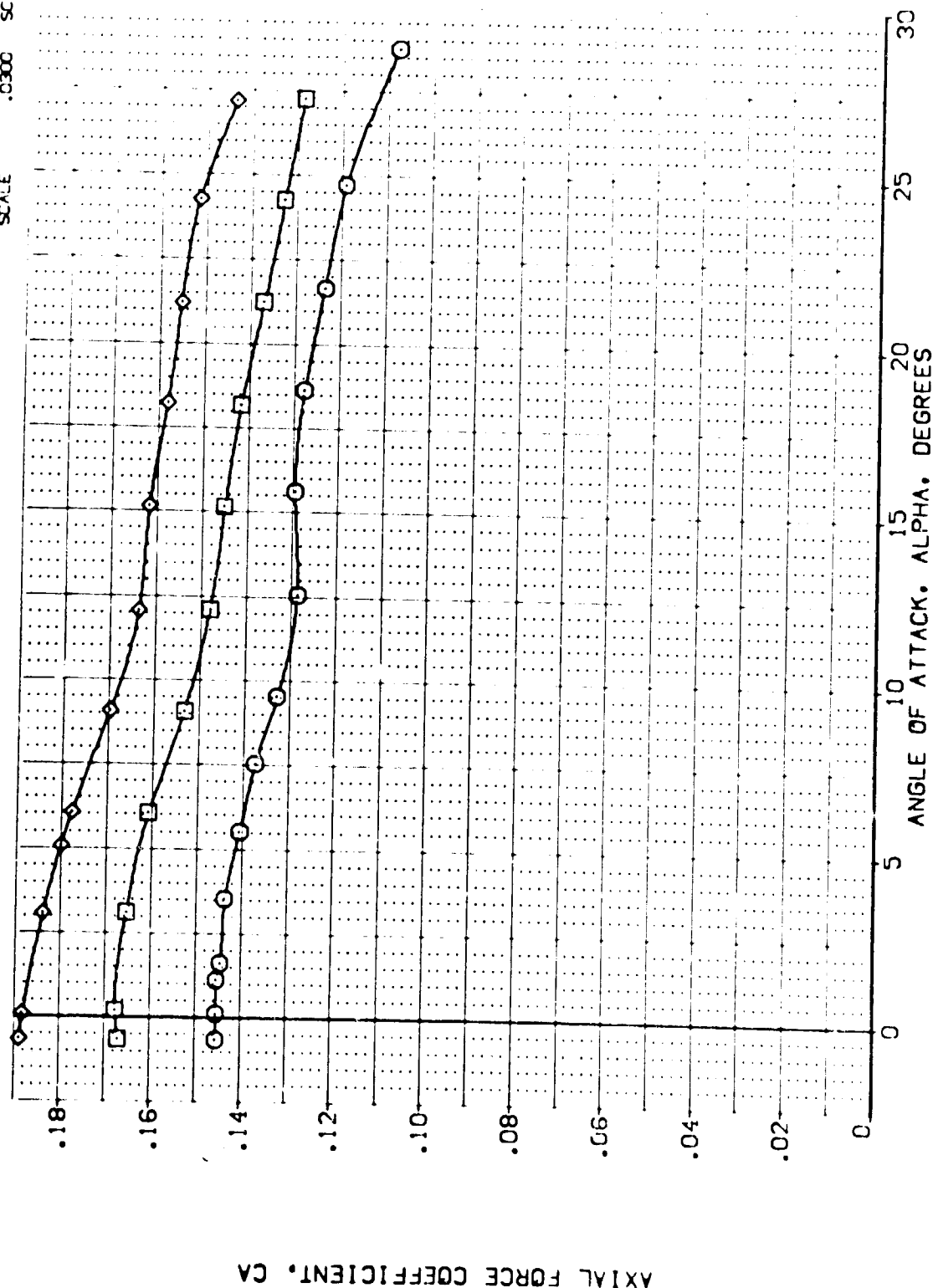


FIG. 9 SPEEDBRAKE EFFECTS

(M)MACH = 1.20

DATA SET SYMBOL CONFIGURATION DESCRIPTION

ARC 11-747 D153A B C M F V1 V NOM. RV/L  
 ARC 11-747 D153A B C M F V1 V NOM. RV/L  
 ARC 11-747 D153A B C M F V1 V NOM. RV/L

ELEVON ALLRON BDF LAP SPOBRK

.000 .000 .000 -11.700 25.000  
 .000 .000 .000 -11.700 55.000  
 .000 .000 .000 -11.700 85.000

REFERENCE INFORMATION

SREF 2.4210 SQ.FT.  
 LREF 14.2440 IN.  
 BREF 28.1204 IN.  
 XMRD 32.3010 IN.  
 YMRD 11.2500 IN.  
 ZMRD 11.2500 IN.  
 SCALE 10300

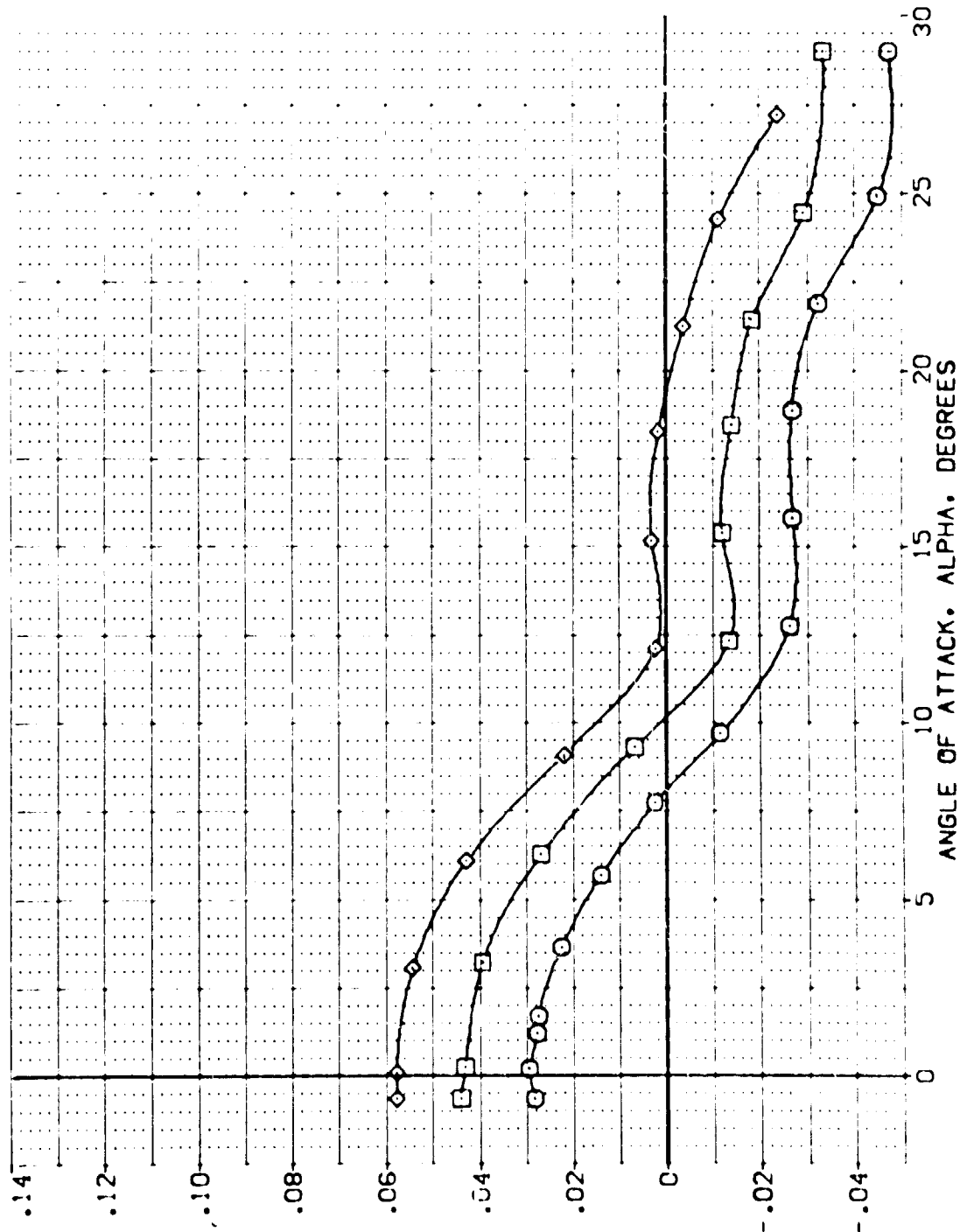


FIG. 9 SPEEDBRAKE EFFECTS

(A) MAC = .60





DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVATION	AIRLIFT	BOFLAP	SPOBRK	REFERENCE INFORMATION
(1EJ011)	ARC 11-747 BA53A B C M F VI V	.000	.000	-11.700	25.000	SREF 2.4210 SC.FY.
(1EJ024)	ARC 11-747 BA53A B C M F VI V	.000	.000	-11.700	55.000	REF 14.2440
(1EJ038)	ARC 11-747 BA53A B C M F VI V	.000	.000	-11.700	85.000	REF 28.1054
						YMRP 32.3010
						ZMRP .0000
						SCALE 11.2500
						SCALE .0300

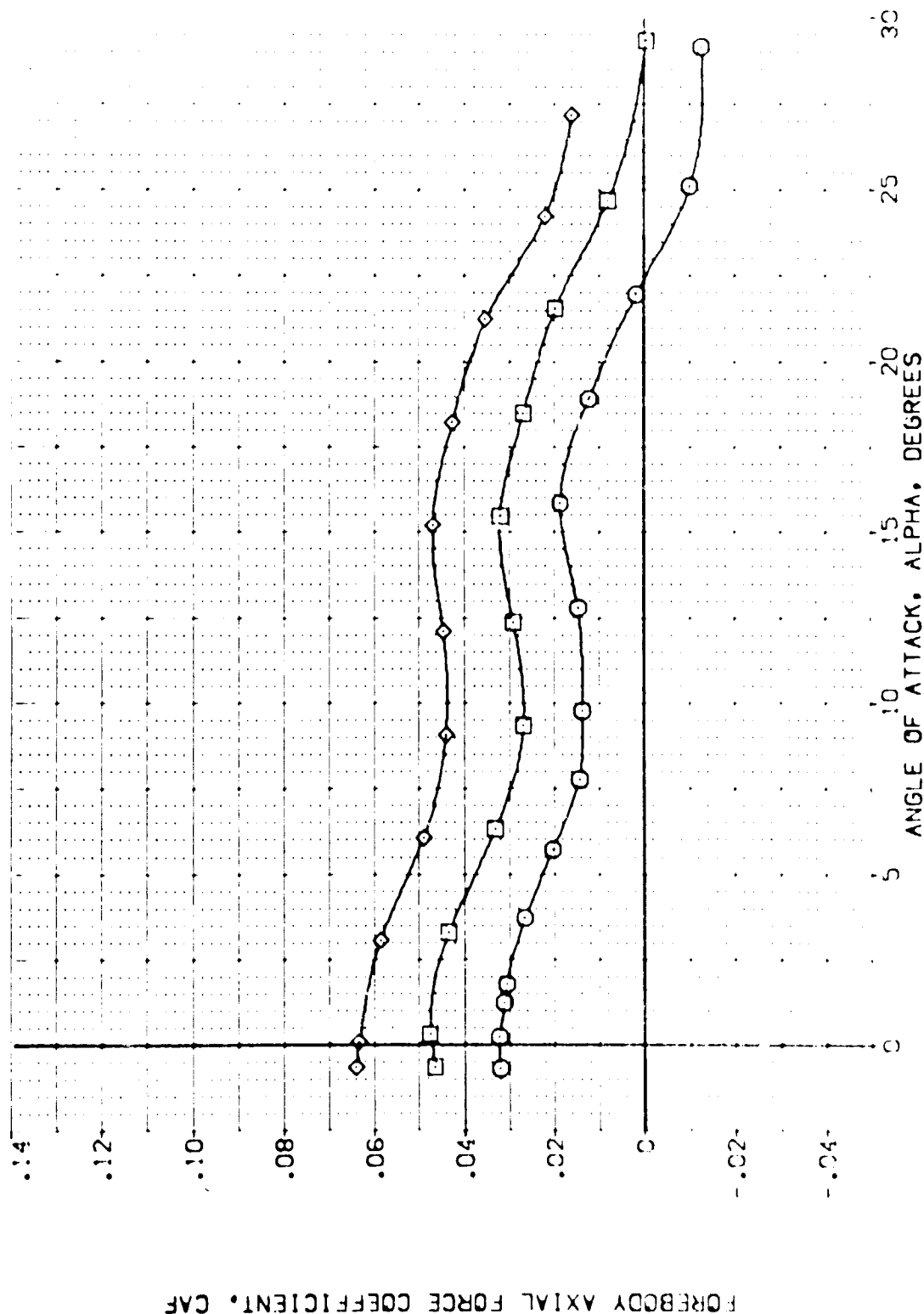
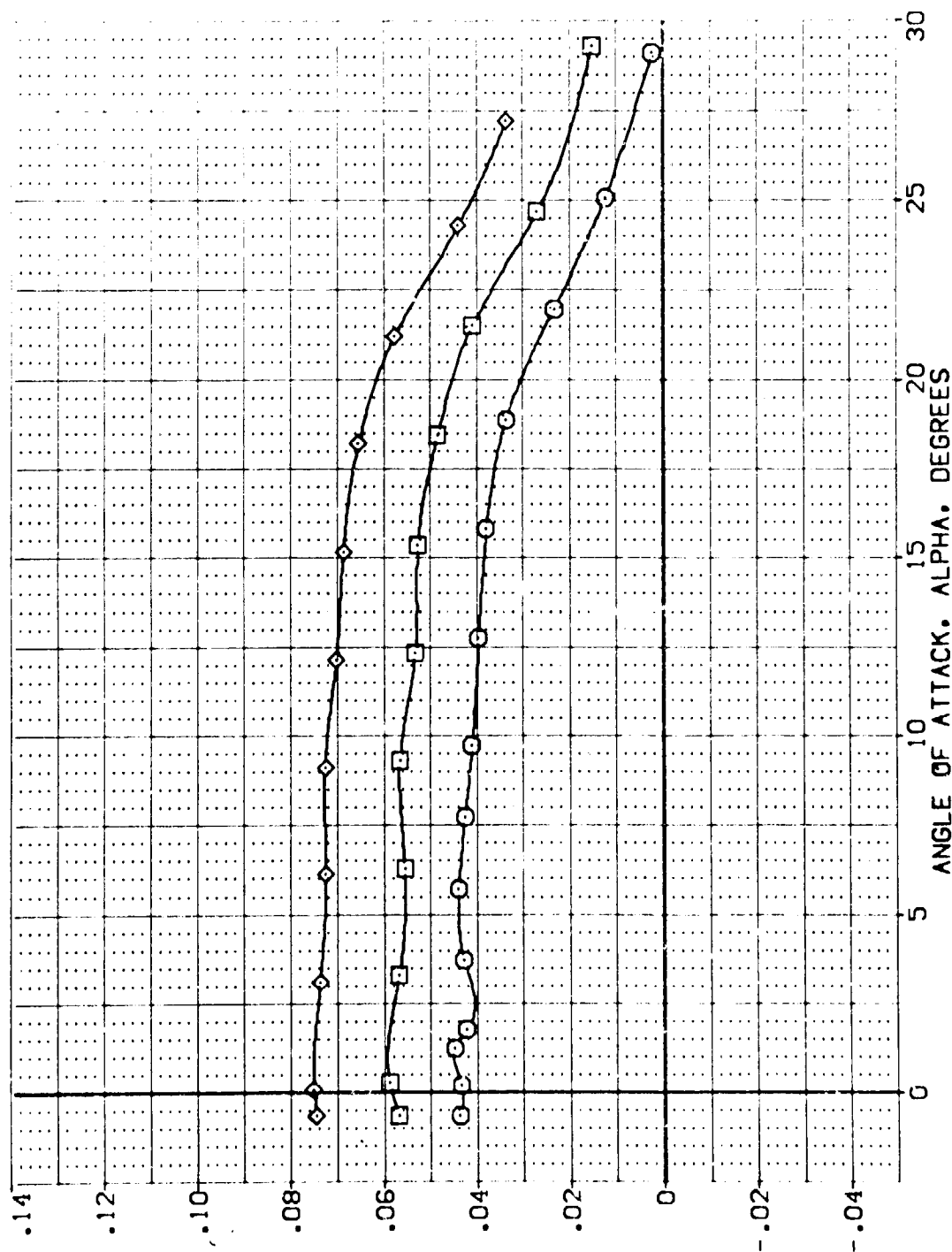


FIG. 9 SPEEDBRAKE EFFECTS

(B) MACH = .80

DATA SET SYMBOL    CONFIGURATION DESCRIPTION    ELEVON    AILERON    BOFLAP    SPEEDBRK    REFERENCE INFORMATION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPEEDBRK	REFERENCE INFORMATION
[TEJ011]	ARC 11-747 OAS3A B C H F VI	.000	.000	-11.700	22.000	SREF 2.4210 SQ.FT.
[TEJ024]	ARC 11-747 OAS3A B C H F VI	.000	.000	-11.700	59.000	LREF 14.2440 IN.
[TEJ038]	ARC 11-747 OAS3A B C H F VI	.000	.000	-11.700	85.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP 11.0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300



FOREBODY AXIAL FORCE COEFFICIENT, CAF

FIG. 9 SPEEDBRAKE EFFECTS

(CJ)MACH = .90



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVATION	AIRLIFT	BOFLAP	SPEED	REFERENCE INFORMATION
(TEJ011)	ARC 11-747 CAS3A B C M F VI V	.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(TEJ024)	ARC 11-747 CAS3A B C M F VI V	.000	.000	-11.700	55.000	LREF 14.2440 IN.
(TEJ038)	ARC 11-747 CAS3A B C M F VI V	.000	.000	-11.700	85.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

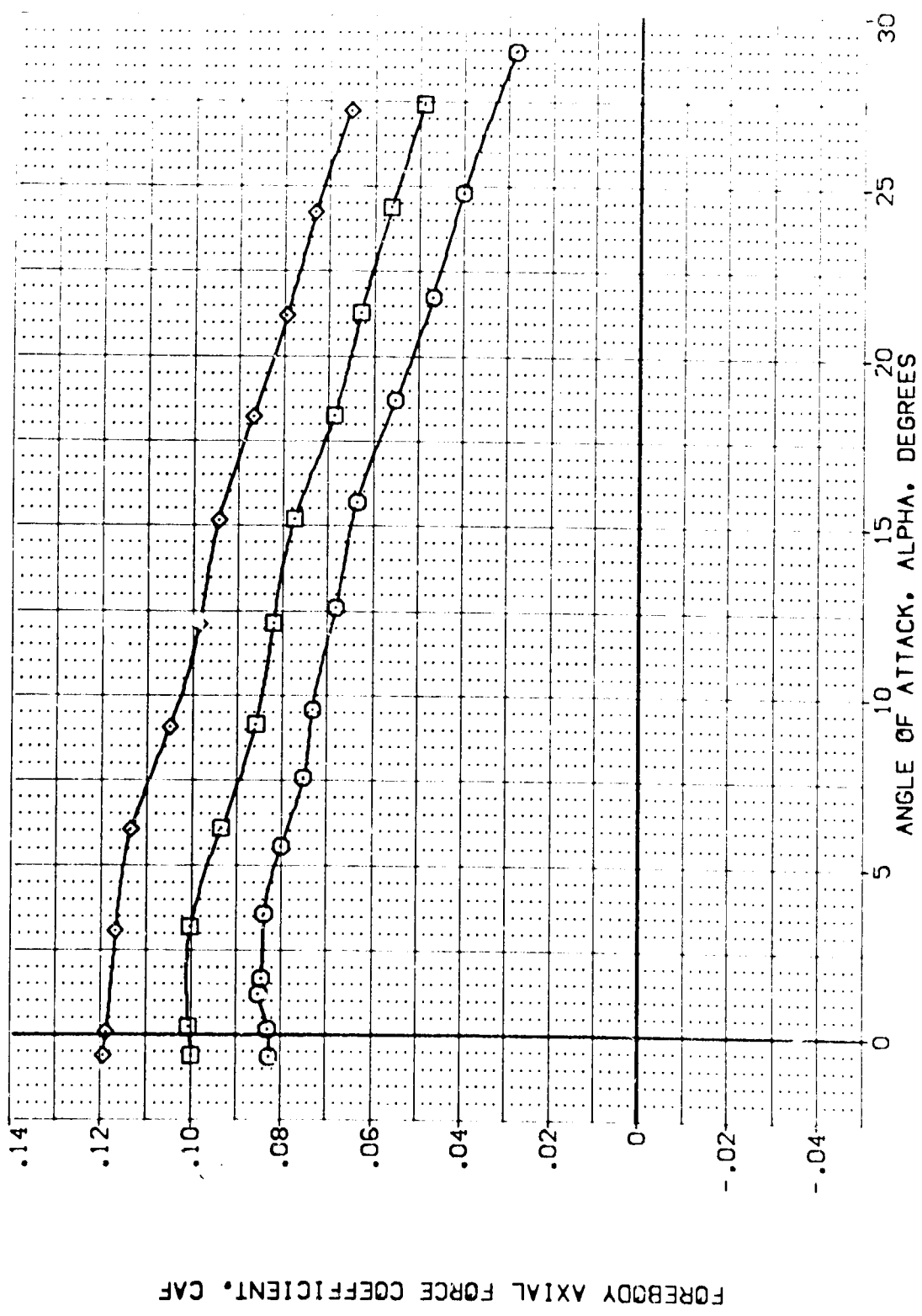


FIG. 9 SPEEDBRAKE EFFECTS  
(CD)MACH = 1.05

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVATION	AILERON	BOFLAP	SPOBRK	REFERENCE INFORMATION
TEJ011	□	ARC 11-747 CUS3A B C M F V	.000	.000	-11.700	25.000	SREF 2.4210 SCALE
TEJ024	◇	ARC 11-747 CUS3A B C M F V	.000	.000	-11.700	55.000	LREF 14.2440 SCALE
TEJ038	○	ARC 11-747 CUS3A B C M F V	.000	.000	-11.700	85.000	BREF 26.1000 SCALE
							VREF 32.3010 SCALE
							ZREF 11.2500 SCALE
							SCALE 1.0000

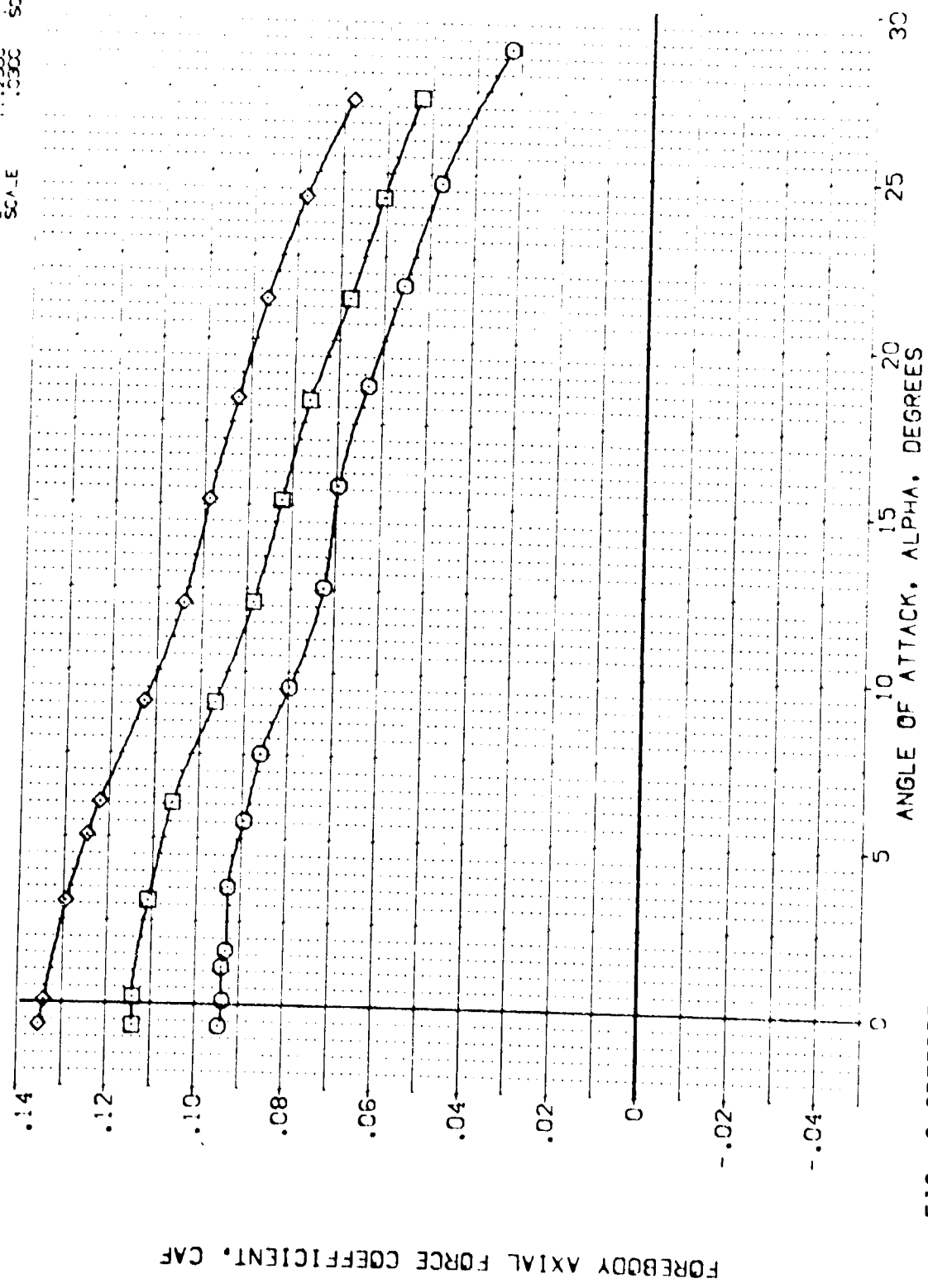


FIG. 9 SPEEDBRAKE EFFECTS

REYNOLDS = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BUFLAP	SPOILER	REFERENCE INFORMATION
(TEJ011)	ARC 11-747 BA53A B C M F VI V	.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(TEJ024)	ARC 11-747 BA53A B C M F VI V	.000	.000	-11.700	55.000	LREF 14.2440 IN.
(TEJ038)	ARC 11-747 BA53A B C M F VI V	.000	.000	-11.700	85.000	BREF 28.1004 IN.
						XMRG 32.3010 IN.
						YMRG .0000 IN.
						ZMRG 11.2500 IN.
						SCALE .0300

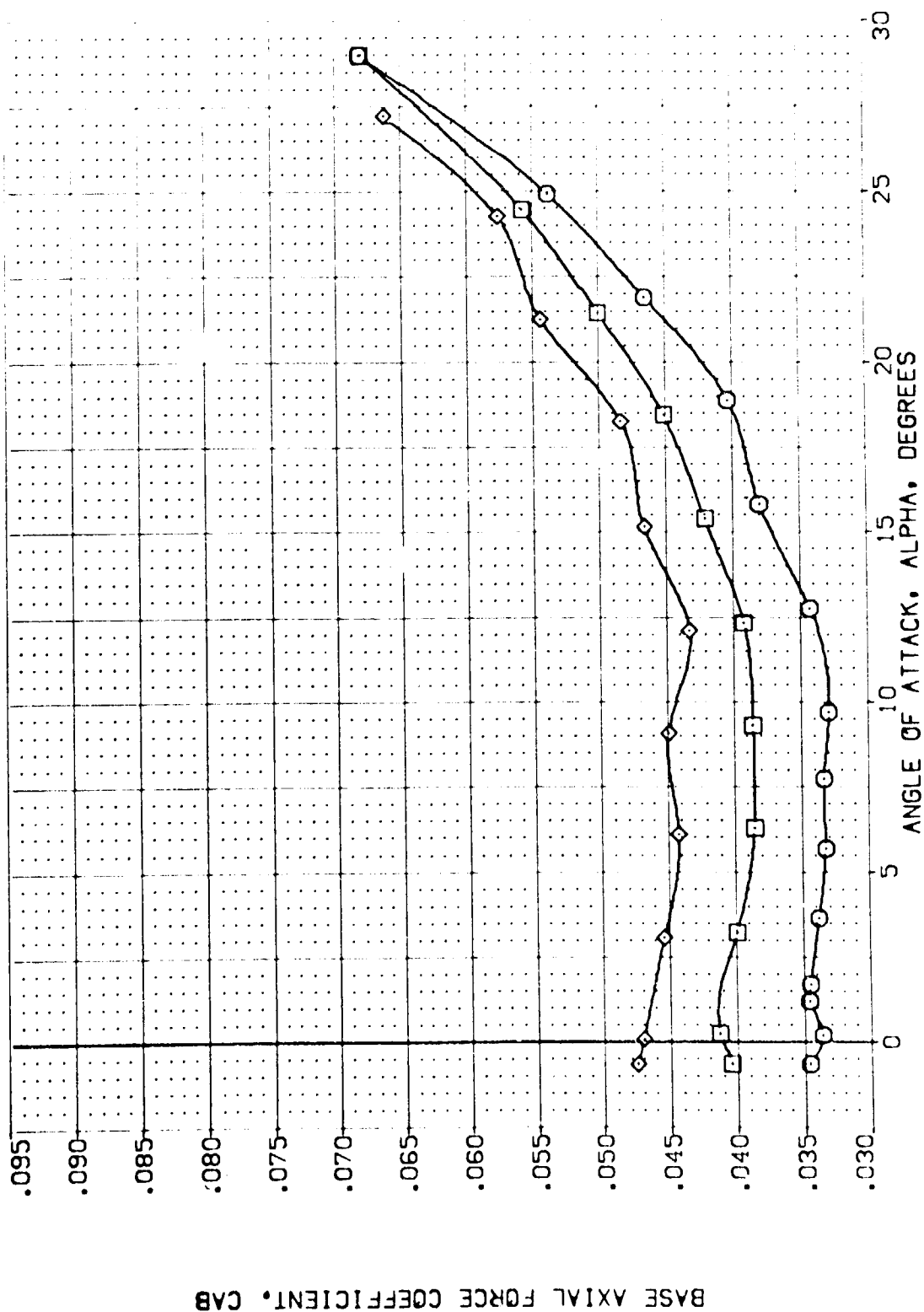


FIG. 9 SPEEDBRAKE EFFECTS

(A) MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BD FLAP	SPODBRK	REFERENCE INFORMATION
(TEJ011)	ARC 11-747 DAS3A B C M F V1 V	.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(TEJ024)	ARC 11-747 DAS3A B C M F V1 V	.000	.000	-11.700	55.000	LREF 14.2440 IN.
(TEJC38)	ARC 11-747 DAS3A B C M F V1 V	.000	.000	-11.700	85.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP .0000 IN.
						SCALE 11.2500
						SCALE .0300

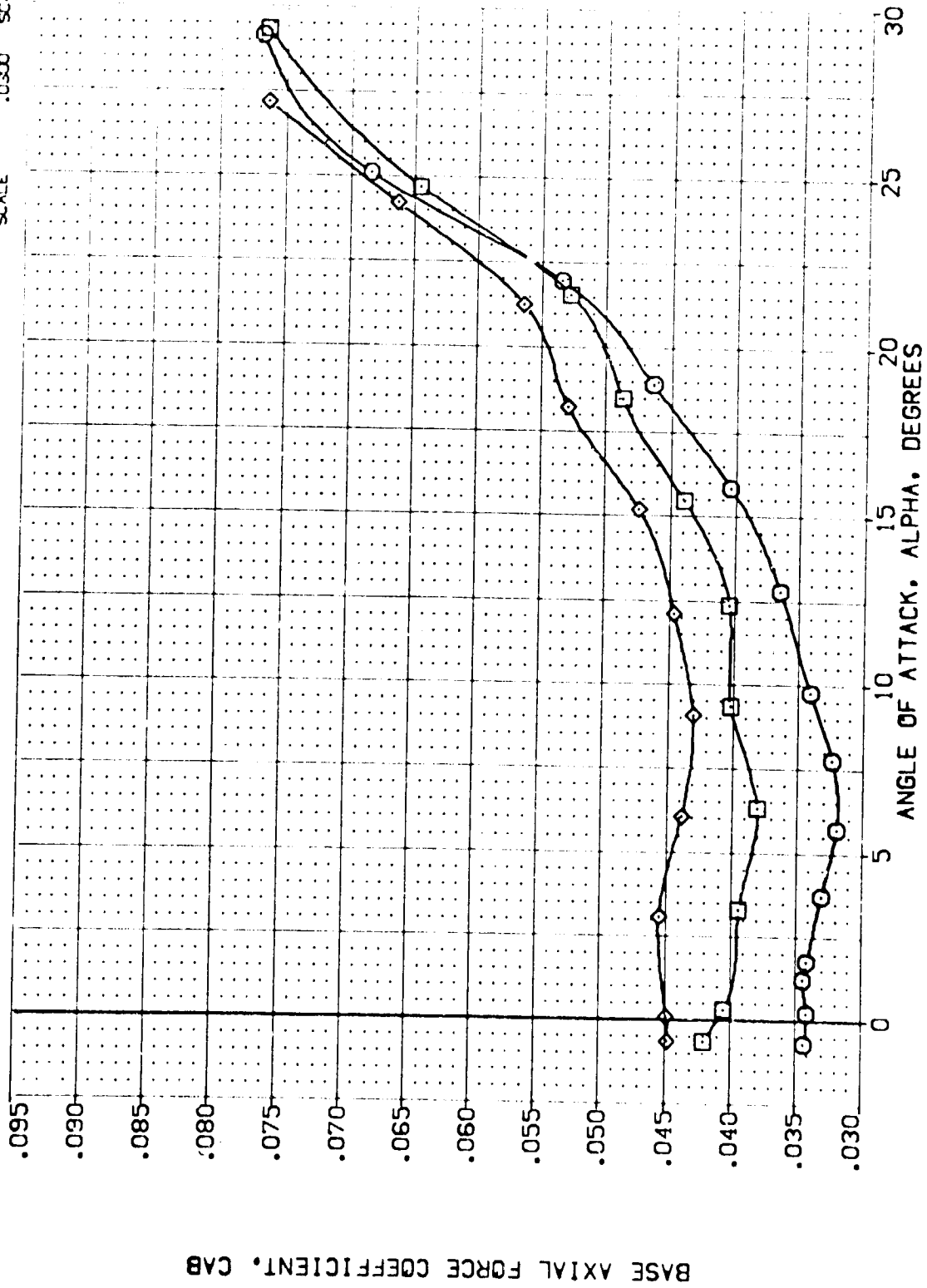


FIG. 9 SPEEDBRAKE EFFECTS

(B)MACH = .80

DATA SET SYMBOL    CONFIGURATION DESCRIPTION    ELEVON    AILERON    BOFLAP    SPEEDBRK    REFERENCE INFORMATION

[TE-011]	ARC 11-747 OAS3A B C M F VI V	.000	.000	-11.700	25.000	SREF 2.4210
[TE-024]	ARC 11-747 OAS3A B C M F VI V	.000	.000	-11.700	55.000	LSREF 14.2440
[TE-038]	ARC 11-747 OAS3A B C M F VI V	.000	.000	-11.700	85.000	BSREF 28.1004
						XSREF 32.3013
						YSREF .0000
						ZSREF 11.2500
						SCALE .0300

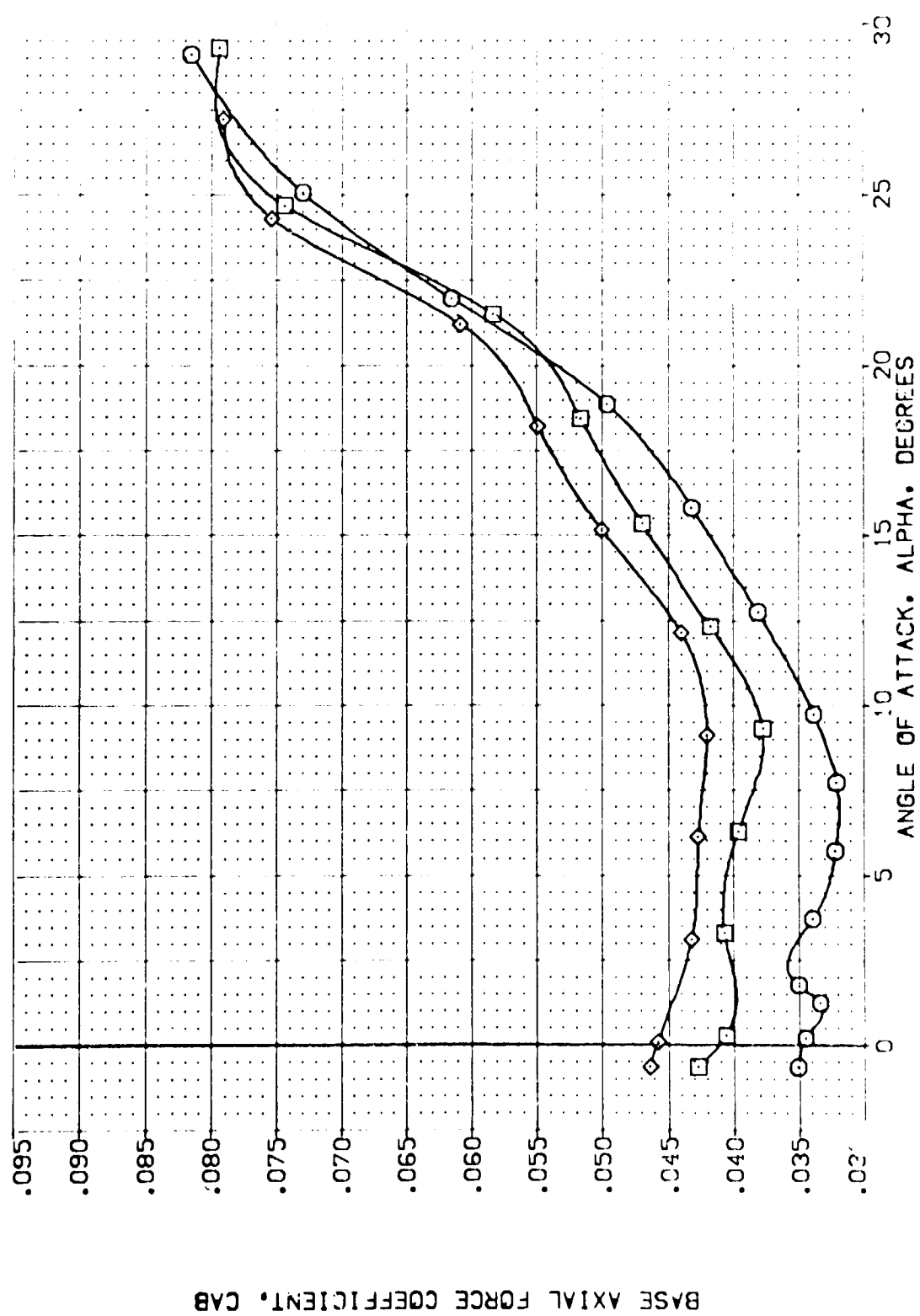


FIG. 9 SPEEDBRAKE EFFECTS

(C)MACH = .90



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVATION	AIRLIFT	BOFLAP	SPOBRK	REFERENCE INFORMATION
[TEJ011]	ARC 11-747 DAS3A B C M F VI V	.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[TEJ024]	ARC 11-747 DAS3A B C M F VI V	.000	.000	-11.700	55.000	LREF 14.2440 IN.
[TEJ038]	ARC 11-747 DAS3A B C M F VI V	.000	.000	-11.700	85.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

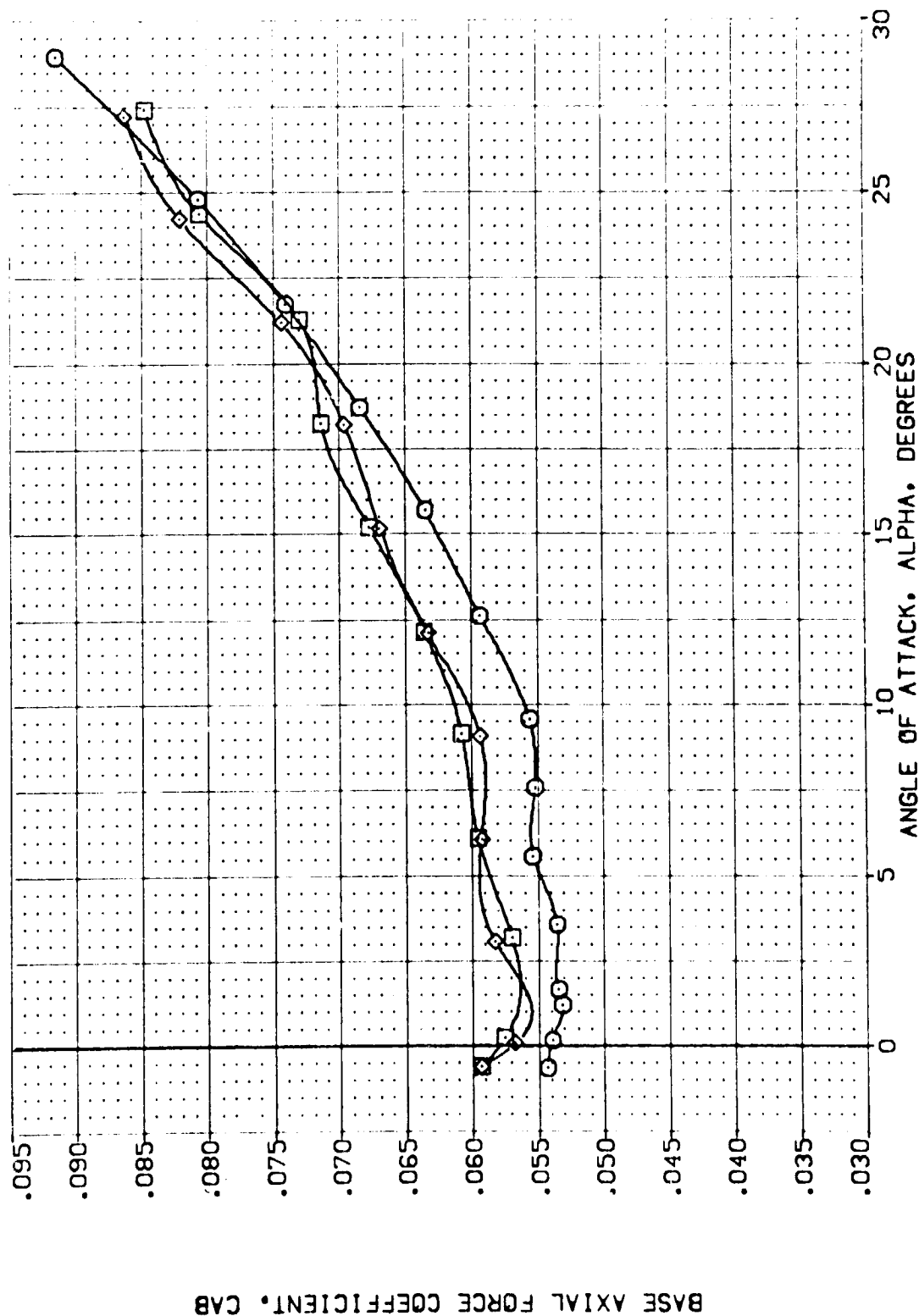


FIG. 9 SPEEDBRAKE EFFECTS

(C)MACH = 1.05



DATA SET SYMBOL		CONFIGURATION DESCRIPTION		ELEVON		AILRON		BOFLAP		SPOBRK		REFERENCE INFORMATION	
[TEJ011]	Q	ARC 11-747	0A53A B C M F VI V	.000	.000	.000	.000	-11.700	25.000	SREF	2.4210	50. FT.	
[TEJ024]	Q	ARC 11-747	0A53A B C M F VI V	.000	.000	.000	.000	-11.700	55.000	LREF	14.2440		
[TEJ038]	Q	ARC 11-747	0A53A B C M F VI V	.000	.000	.000	.000	-11.700	85.000	BREF	28.1004		
										XMRP	32.3010		
										YMRP	.0000		
										ZMRP	11.2500		
										SCALE	.0000	SCALE	

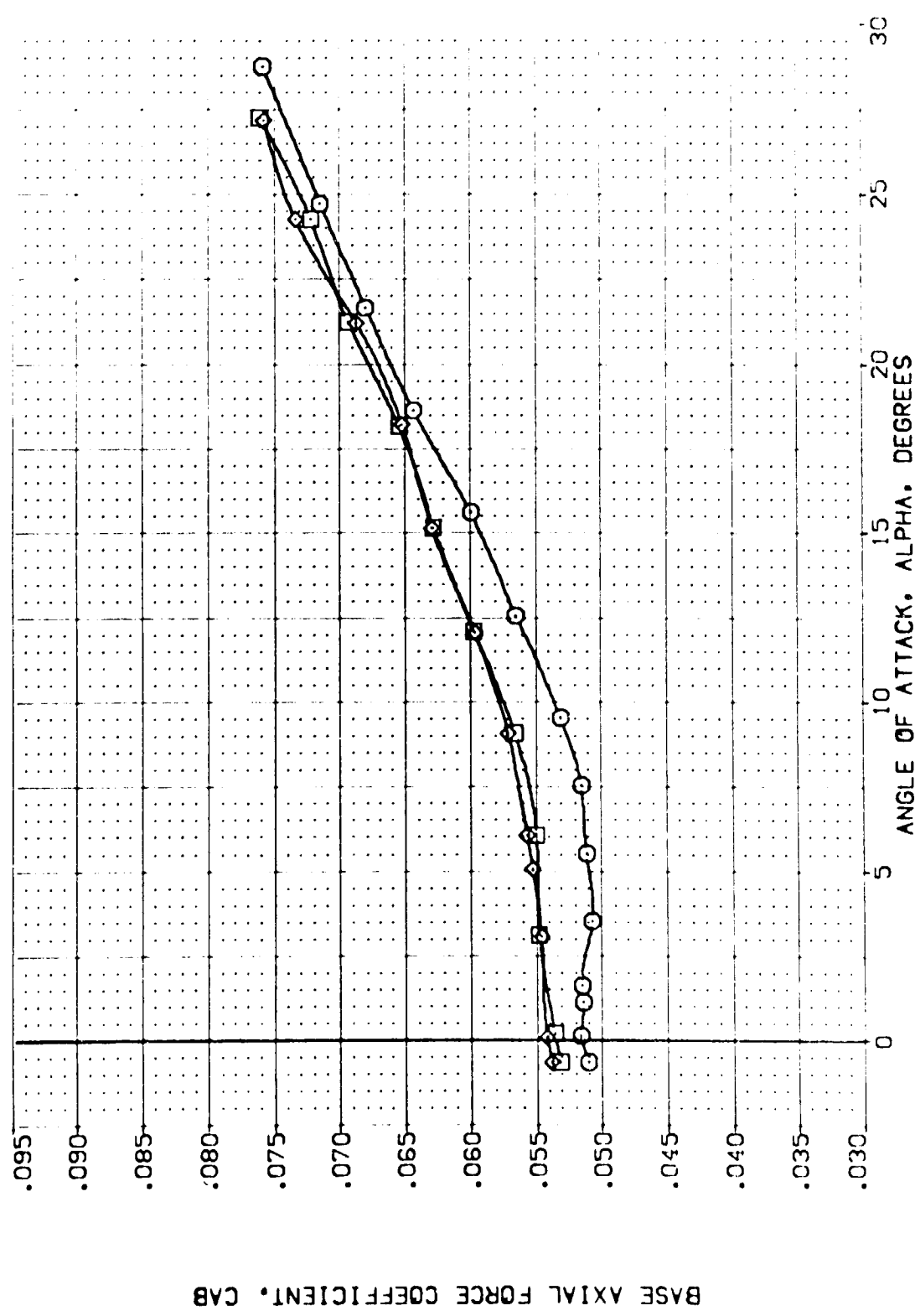


FIG. 9 SPEEDBRAKE EFFECTS

(E)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPOBRK	REFERENCE INFORMATION
[TEJO11]	ARC 11-747 D453A B C M F V1	.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[TEJO24]	ARC 11-747 D453A B C M F V1	.000	.000	-11.700	55.000	LREF 14.2440
[TEJO38]	ARC 11-747 D453A B C M F V1	.000	.000	-11.700	85.000	BREF 28.1004
						XREF 32.3016
						YREF .0000
						ZREF 11.2500
						SCALE .0300

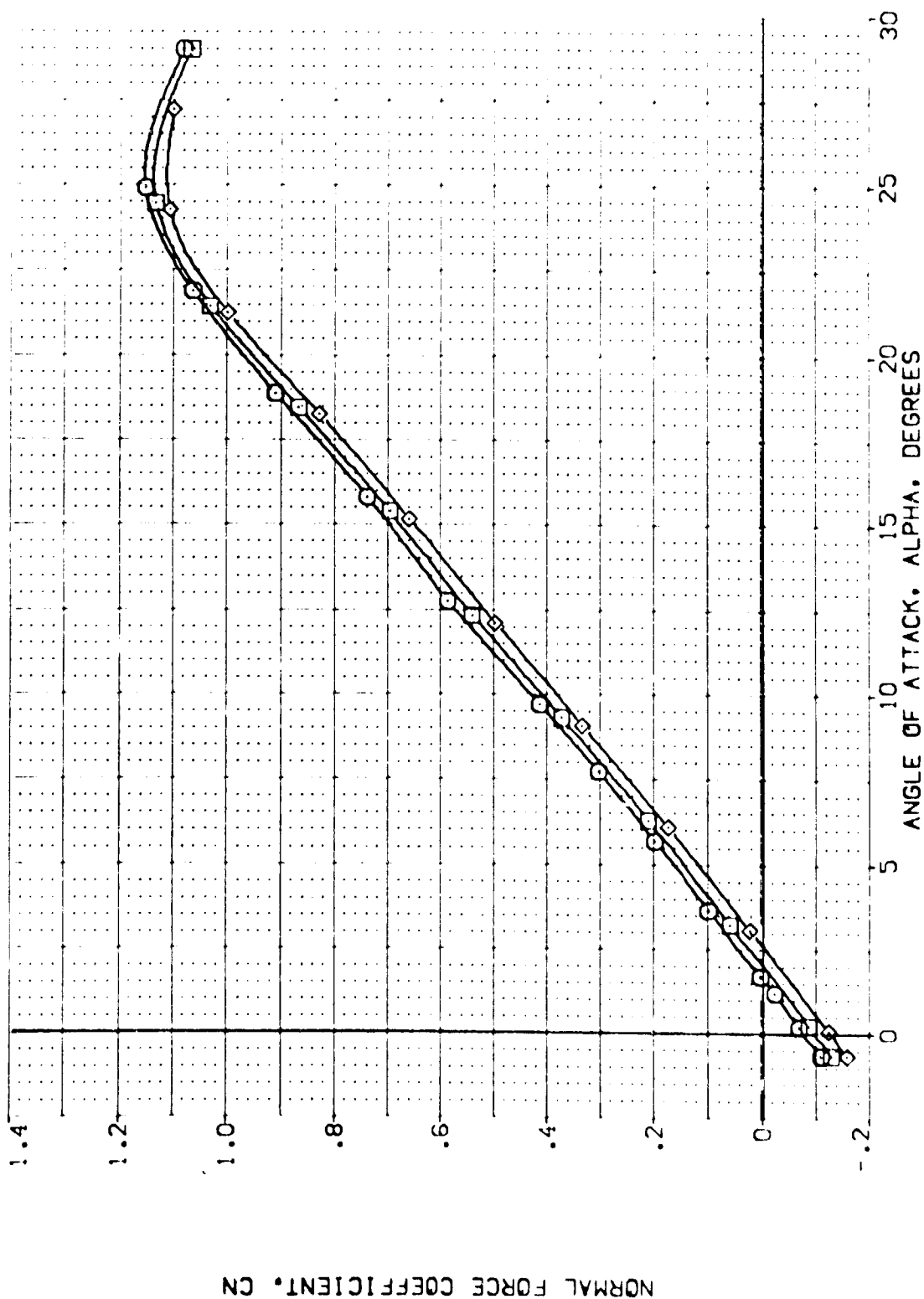


FIG. 9 SPEEDBRAKE EFFECTS

(M)MACH = .60



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILEON	BOFLAP	SPOBRK	REFERENCE INFORMATION
(TEJ011)	ARC 11-747 OA53A B C H F VI V	.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(TEJ024)	ARC 11-747 OA53A B C H F VI V	.000	.000	-11.700	55.000	LREF 14.2440
(TEJ038)	ARC 11-747 OA53A B C H F VI V	.000	.000	-11.700	85.000	BREF 28.1004
						XMRP 32.3010
						YMRP .0000
						ZMRP .0000
						SCALE 11.2500
						SCALE .0300

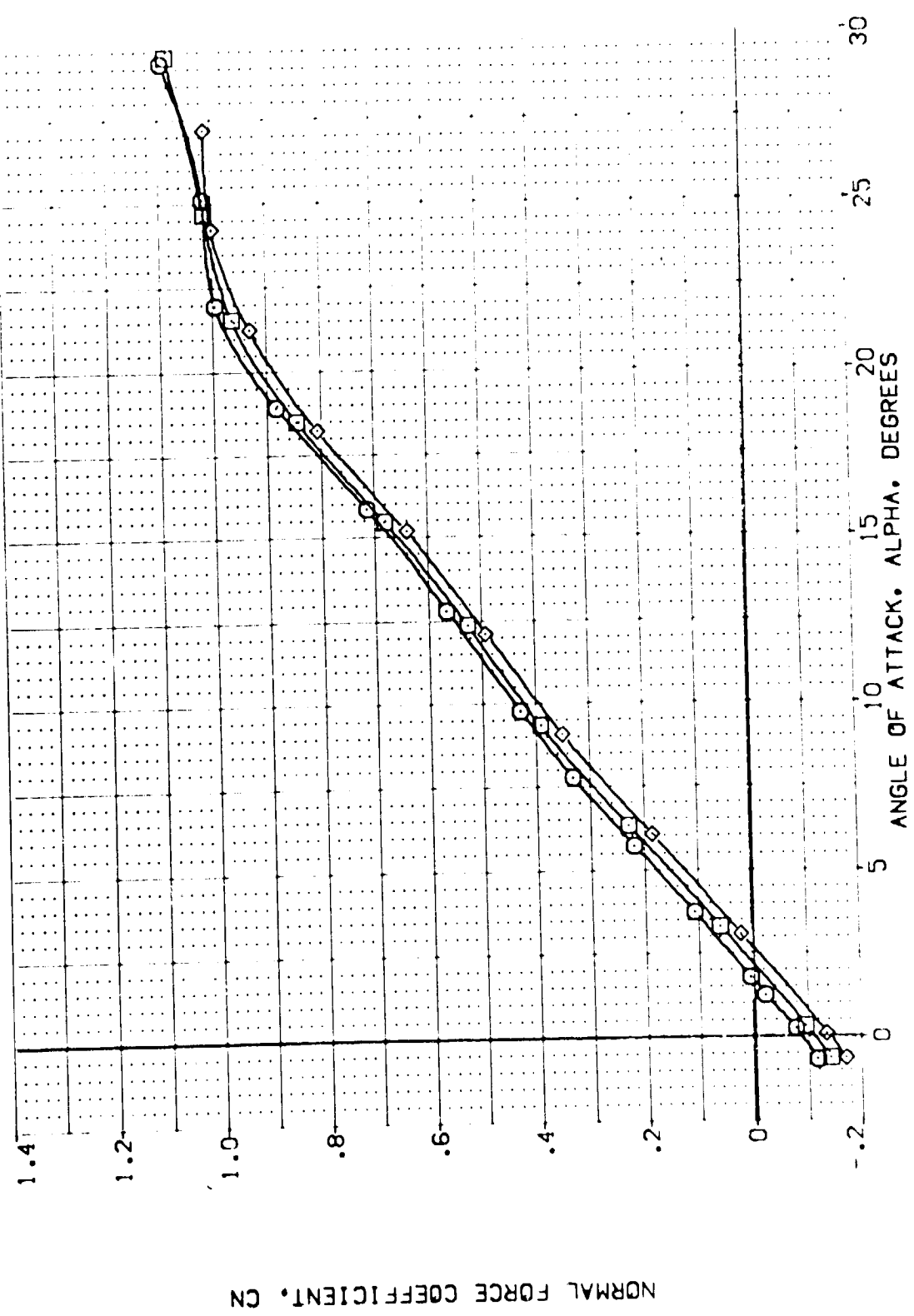


FIG. 9 SPEEDBRAKE EFFECTS

(B) MACH = .80

DATA SET SYMBOL		CONFIGURATION DESCRIPTION		ELEVON		AIL/ROD		BO/LAP		SPODBRK		REFERENCE INFORMATION	
(TEJ011)	ARC 11-747	0A53A	B C M F VI V	.000	.000	.000	-11.700	25.000	SREF	2.4210	50.000		
(TEJ024)	ARC 11-747	0A53A	B C M F VI V	.000	.000	.000	-11.700	55.000	LREF	14.2440	100.000		
(TEJ038)	ARC 11-747	0A53A	B C M F VI V	.000	.000	.000	-11.700	85.000	BREF	28.1004	100.000		
									XREF	32.3010	100.000		
									YREF	11.0000	100.000		
									ZREF	11.0000	100.000		
									SCALE	11.0000	100.000		

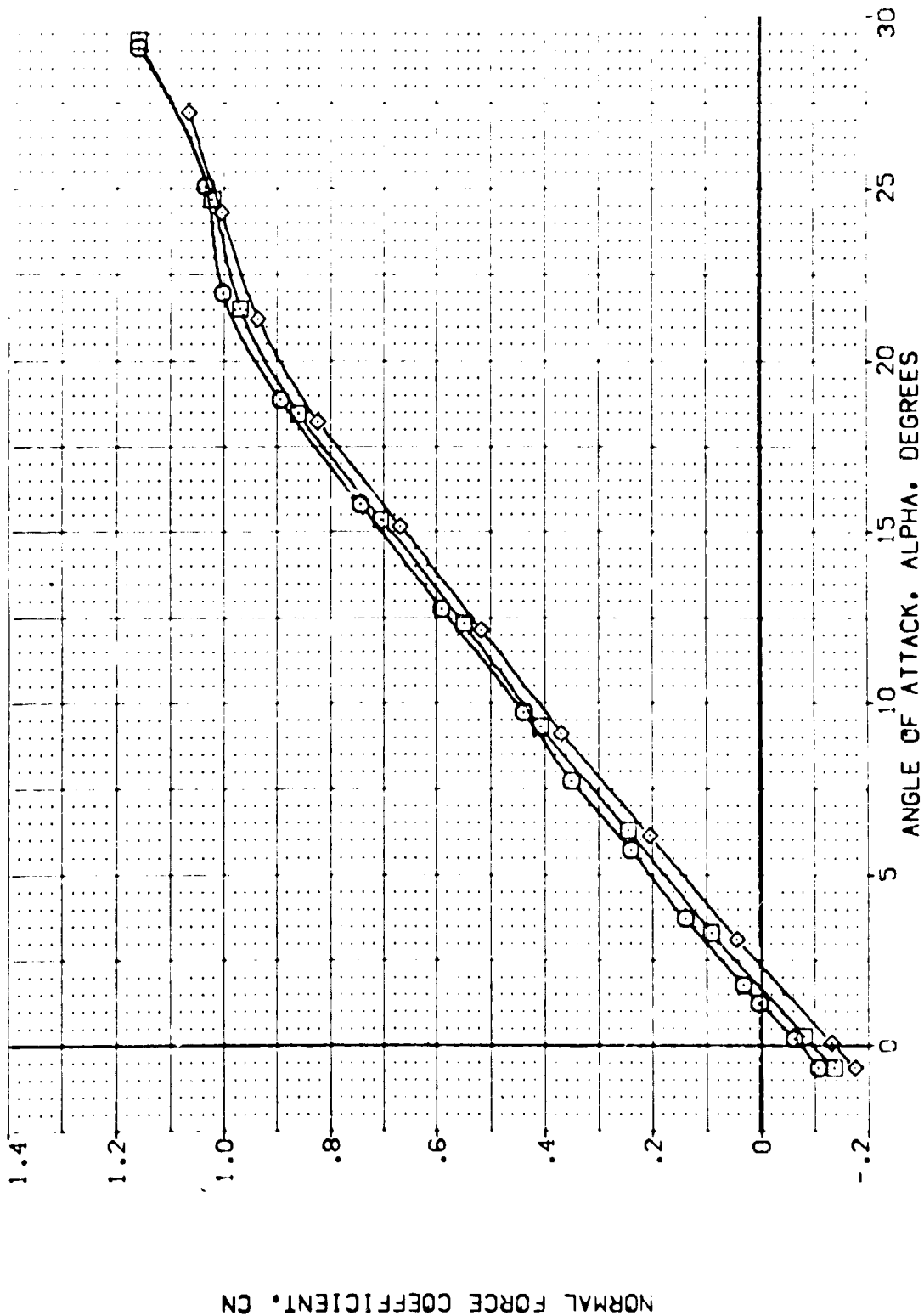


FIG. 9 SPEEDBRAKE EFFECTS

(C)MACH = .90

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(TEJ011) ARC 11-747 0A53A B C H F VI V NOM: RV/L

(TEJ024) ARC 11-747 0A53A B C H F VI V NOM: RV/L

(TEJ038) ARC 11-747 0A53A B C H F VI V NOM: RV/L

ELEVON AILERON BOFLAP SPEEDBRAK

.000 .000 -11.700 25.000

.000 .000 -11.700 53.000

.000 .000 -11.700 85.000

REFERENCE INFORMATION

SREF 2.4210 SQ.FT.

LREF 14.2440 IN.

BREF 28.1004 IN.

XMRP 32.3010 IN.

YMRP .0000 IN.

ZMRP 11.2500 IN.

SCALE .0300

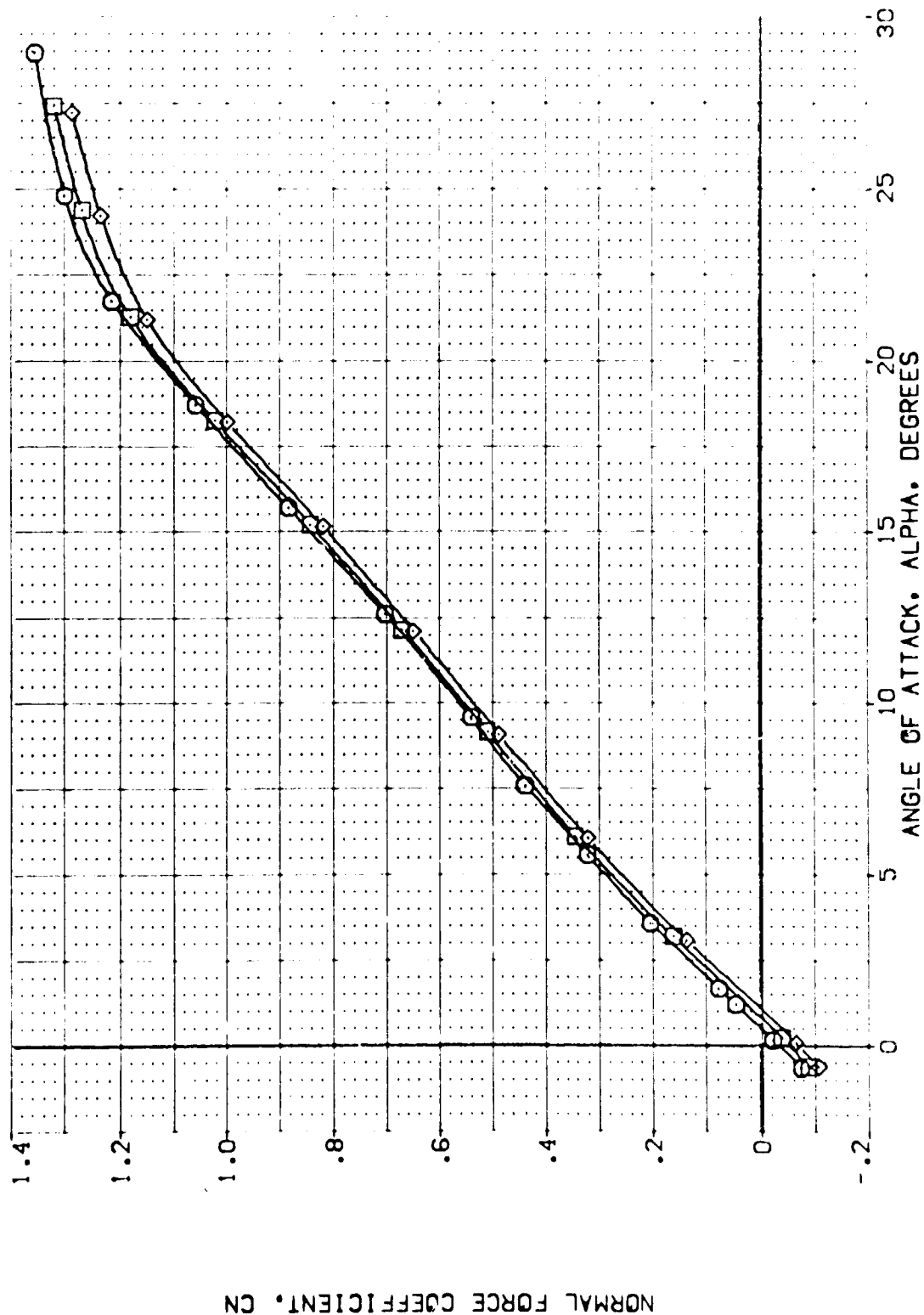


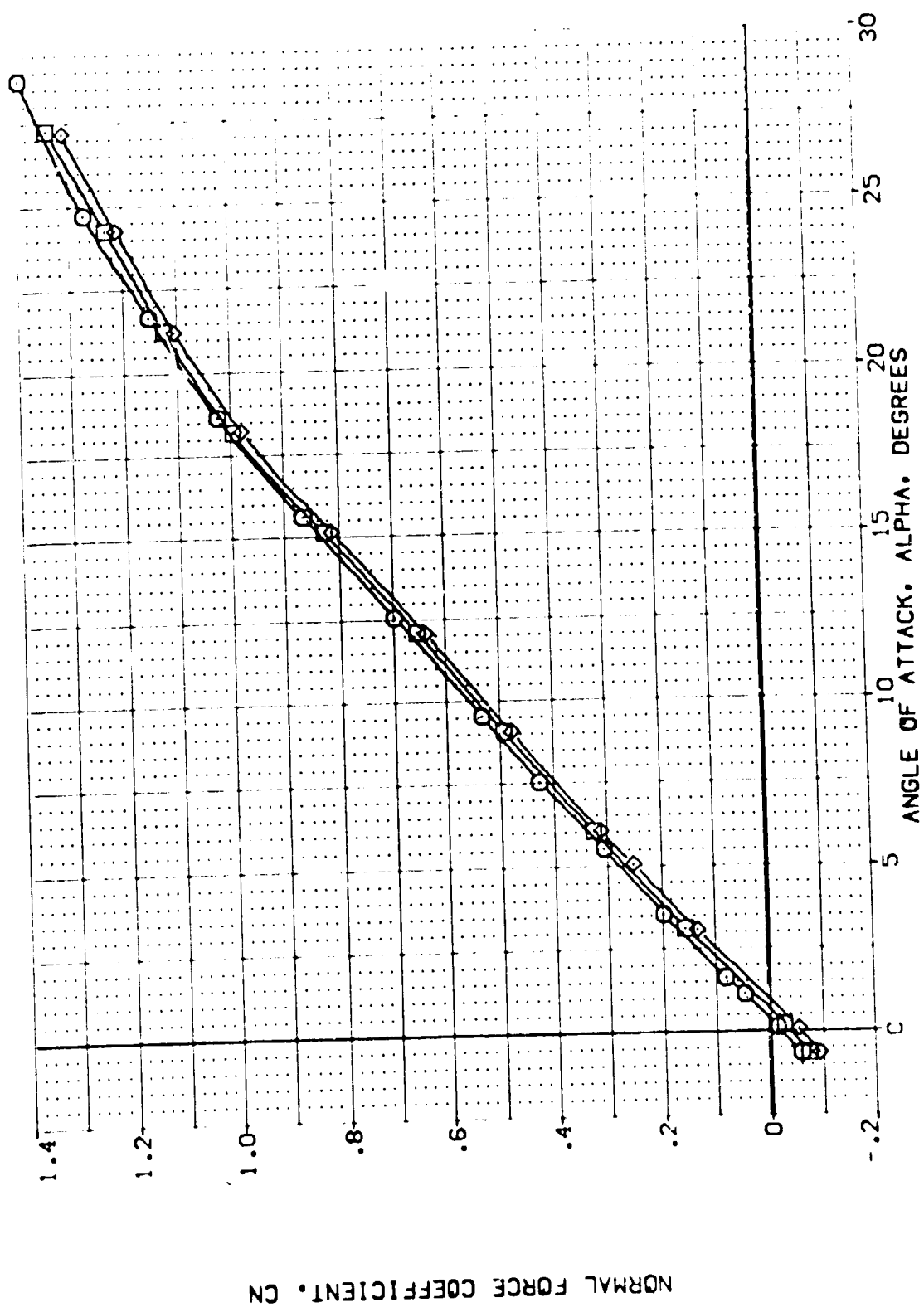
FIG. 9 SPEEDBRAKE EFFECTS

COMACH = 1.05

REFERENCE INFORMATION:  
 SREF 2.4710 SQ.FT.  
 LREF 14.2440  
 BREF 28.1004  
 XMRP 32.3010  
 YMRP 0.0000  
 ZMRP 11.2500  
 SCALE 0.300

ELEVON AILRON BOFLAP SPOBRK  
 .000 .000 -11.700 25.000  
 .000 .000 -11.700 55.000  
 .000 .000 -11.700 85.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 [TEJ011] ARC 11-747 DA53A B C M F VI V  
 [TEJ024] ARC 11-747 DA53A B C M F VI V  
 [TEJ038] ARC 11-747 DA53A B C M F VI V



NORMAL FORCE COEFFICIENT, CN

FIG. 9 SPEEDBRAKE EFFECTS

(E)MACH = 1.20

DATA SET SYMBOL CONFIGURATION DESCRIPTION

ARC 11-747 2A53A B C H F VI V NO.1. RVUL  
 ARC 11-747 2A53A B C H F VI V NO.1. RVUL  
 ARC 11-747 2A53A B C H F VI V NO.1. RVUL

ELEVON AILERON BOFLAP SPEED  
 .000 .000 .000 25.000  
 .000 .000 .000 55.000  
 .000 .000 .000 85.000

REFERENCE INFORMATION  
 SREF 2.4210 SQ.FT.  
 LREF 14.2440  
 BREF 28.1004  
 XMRP 32.3010  
 YMRP .0000  
 ZMRP 11.2500  
 SCALE .0300 SCALE

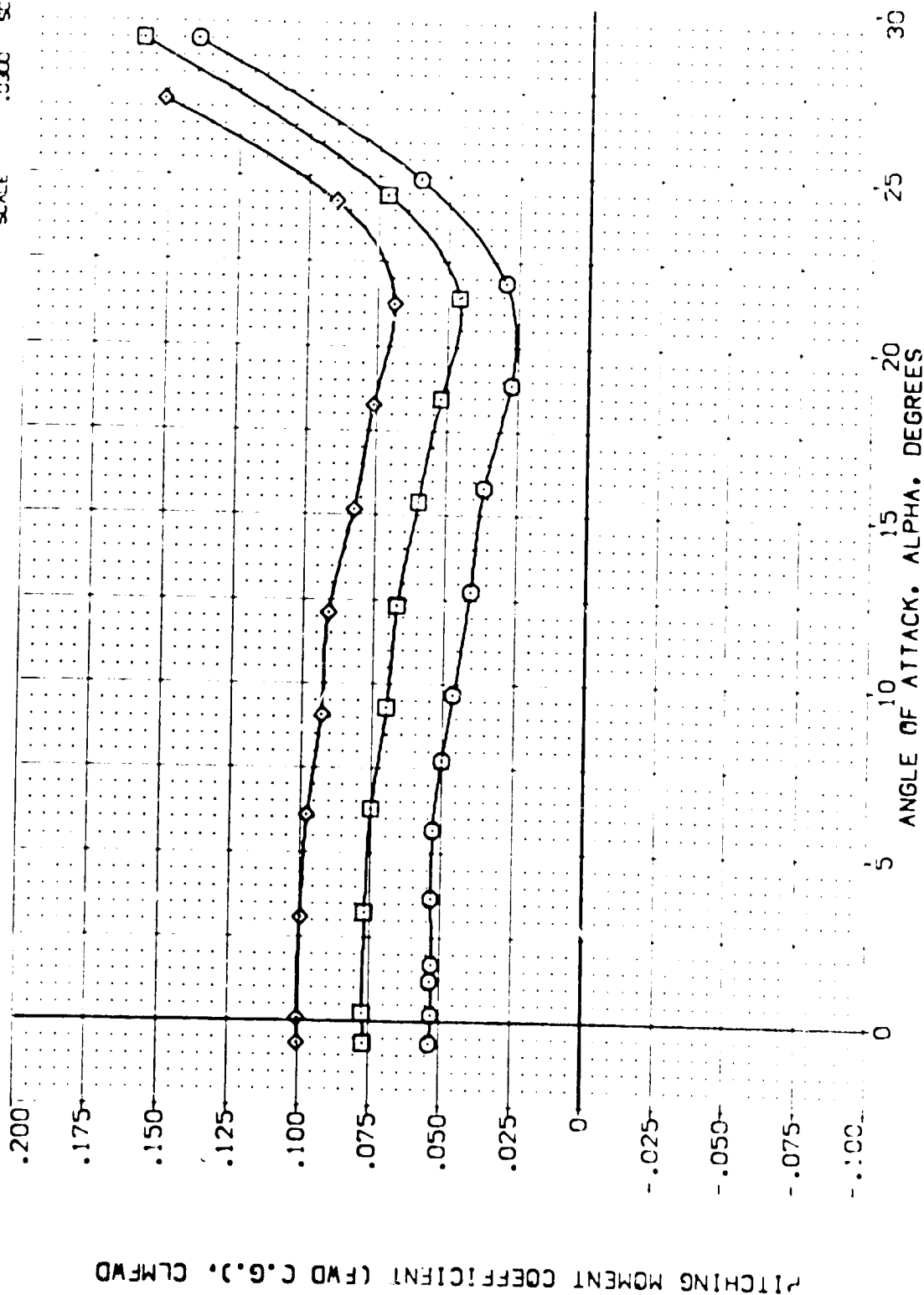


FIG. 9 SPEEDBRAKE EFFECTS

(A)MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPOBRK	REFERENCE INFORMATION
(TE4011)	ARC 11-747 BA53A B C M F VI V	.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(TE4024)	ARC 11-747 BA53A B C M F VI V	.000	.000	-11.700	55.000	LREF 14.2440 IN.
(TE4038)	ARC 11-747 BA53A B C M F VI V	.000	.000	-11.700	85.000	BREF 28.1004 IN.
						XMPP 32.3010 IN.
						YMPP .0000 IN.
						ZMPP 11.2500 IN.
						SCALE .0300

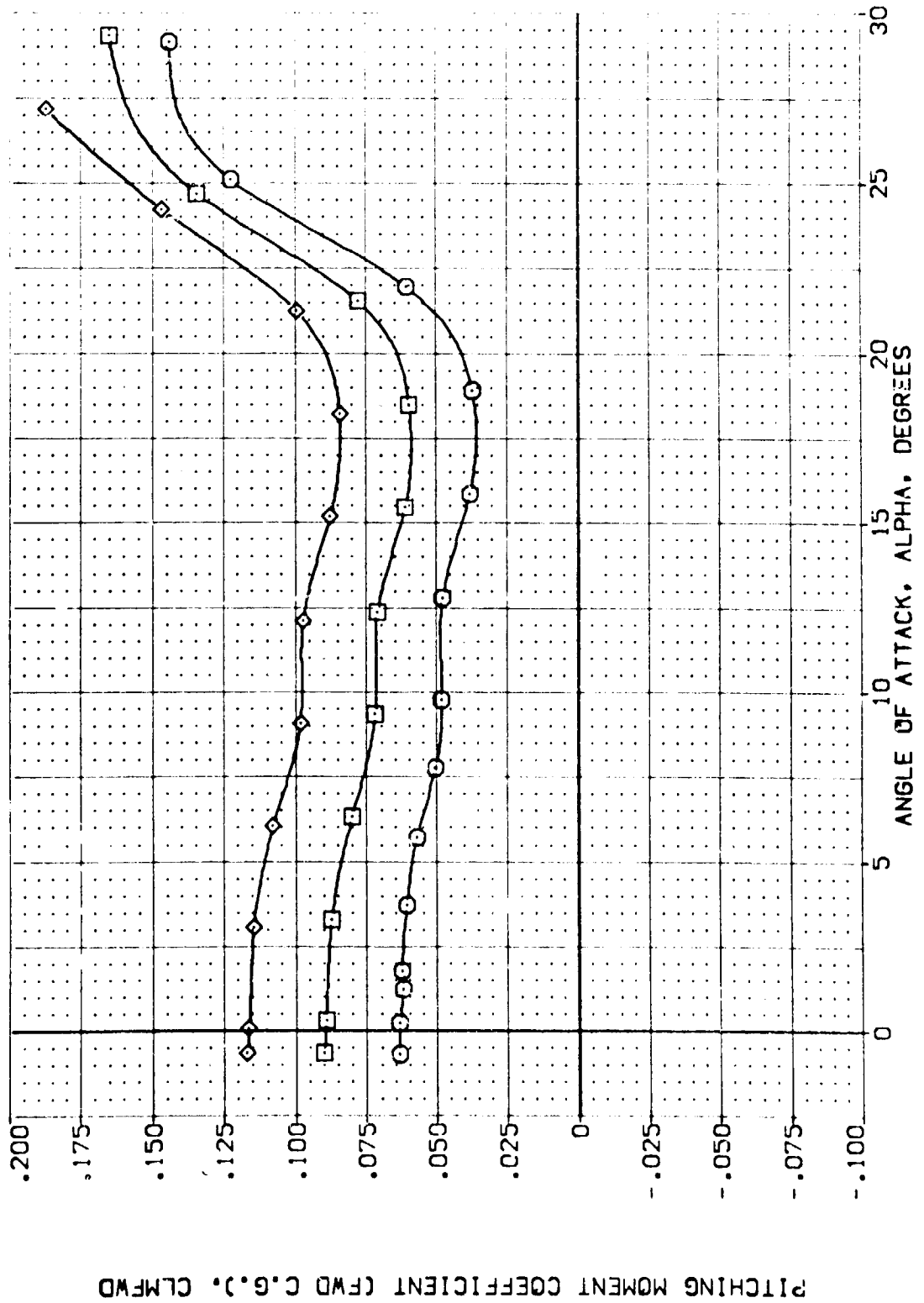


FIG. 9 SPEEDBRAKE EFFECTS

(B)MACH = .80





DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPEEDBK	REFERENCE INFORMATION
(TEJ011)	ARC 11-747 DAS3A B C M F V1 V	.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(TEJ024)	ARC 11-747 DAS3A B C M F V1 V	.000	.000	-11.700	55.000	LREF 14.2440 IN.
(TEJ038)	ARC 11-747 DAS3A B C M F V1 V	.000	.000	-11.700	85.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

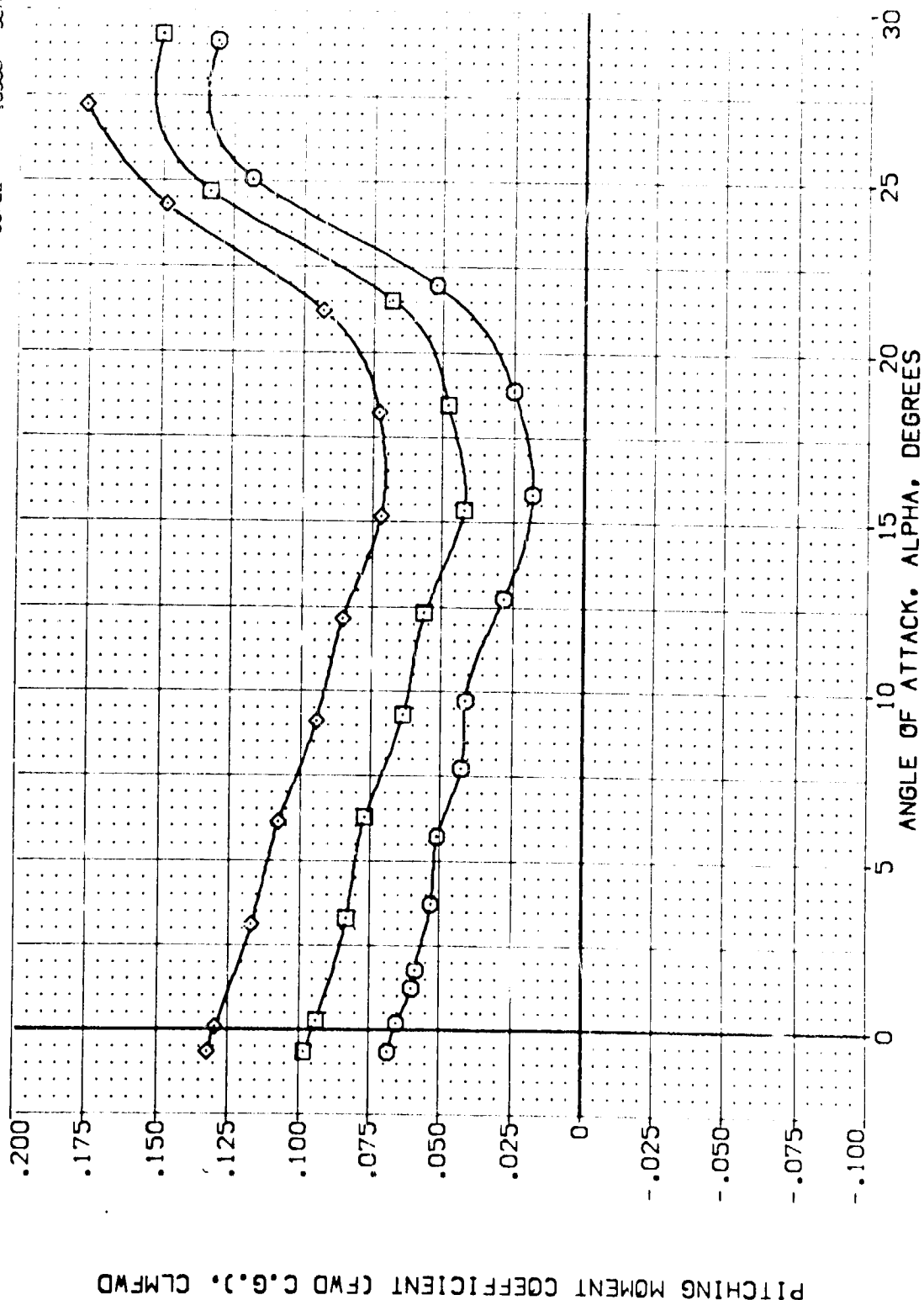


FIG. 9 SPEEDBRAKE EFFECTS

(C)MACH = .90

DATA SET SYMBOL    CONFIGURATION DESCRIPTION    ELEVON    AILRON    BOFLAP    SPOBRK    REFERENCE INFORMATION

Symbol	Configuration	Elevon	Ailron	Boflap	SpoBrk	SREF	LREF	BREF	XMRP	YMRP	ZMRP	SCALE
TEJ011	ARC 11-747 CAS3A B C H F VI V	.000	.000	-11.700	25.000	2.4210	14.2440	28.1004	32.3010	11.2500	10.300	50. FT.
TEJ024	ARC 11-747 CAS3A B C H F VI V	.000	.000	-11.700	55.000							
TEJ038	ARC 11-747 CAS3A B C H F VI V	.000	.000	-11.700	85.000							

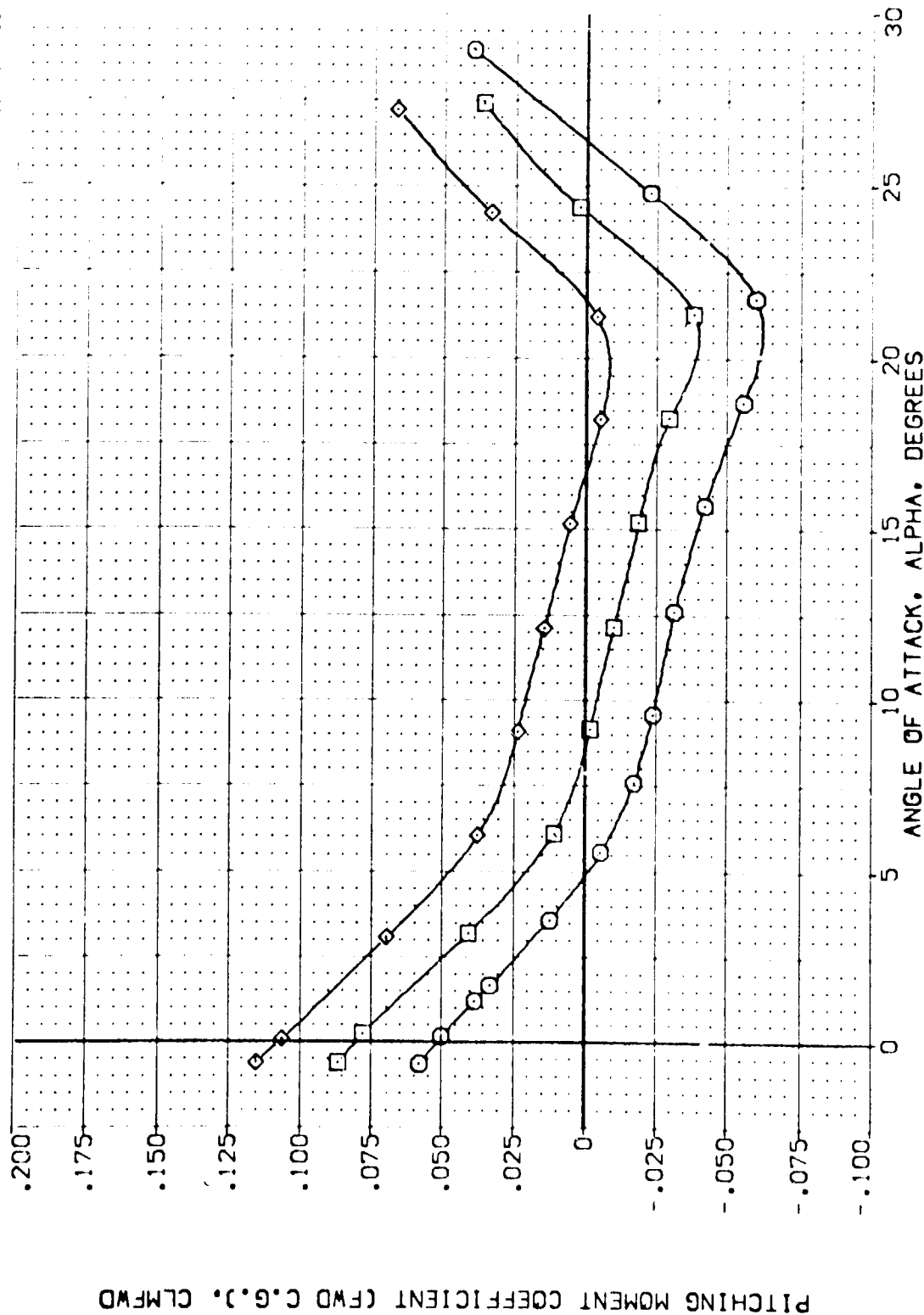
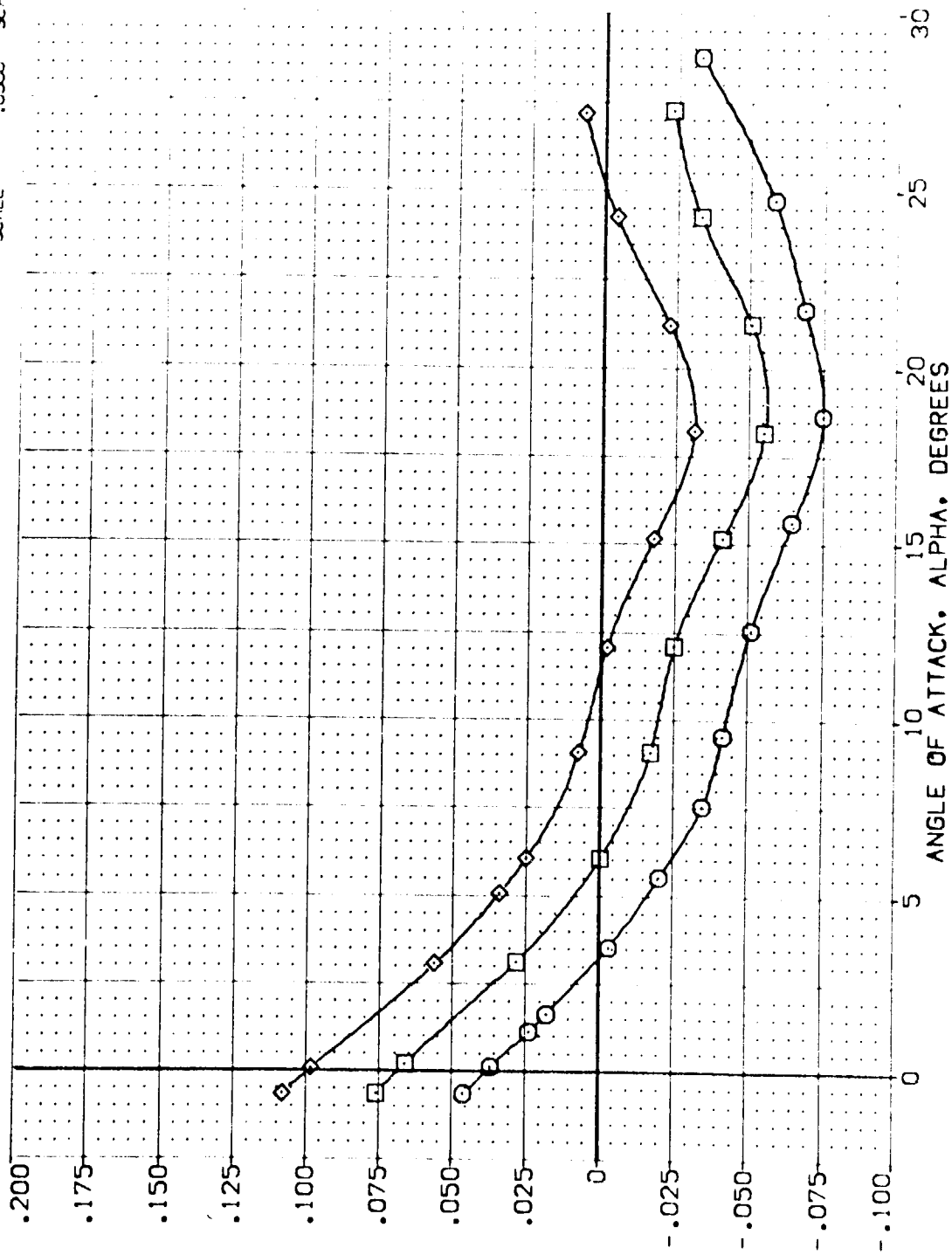


FIG. 9 SPEEDBRAKE EFFECTS

(M)MACH = 1.05

DATA SET SYMBOL CONFIGURATION DESCRIPTION REFERENCE INFORMATION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVATION	AIRLON	BOFLAP	SPDBRK	SRF	2.4210	50.17
(TEJ011)	ARC 11-747 OA53A B C M F VI V	.000	.000	-11.700	25.000	LR	14.2440	11.000
(TEJ024)	ARC 11-747 OA53A B C M F VI V	.000	.000	-11.700	55.000	BR	28.1004	11.000
(TEJ038)	ARC 11-747 OA53A B C M F VI V	.000	.000	-11.700	85.000	YMRP	32.3010	11.000
						ZMRP	11.2500	11.000
						SCALE	.0300	SCALE

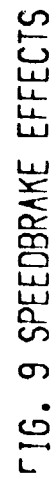


PITCHING MOMENT COEFFICIENT (FWD C.G.), CLMFW

FIG. 9 SPEEDBRAKE EFFECTS

(MACH = 1.20)

PITCHING MOMENT COEFFICIENT (AFT C.G.), CLMAFT

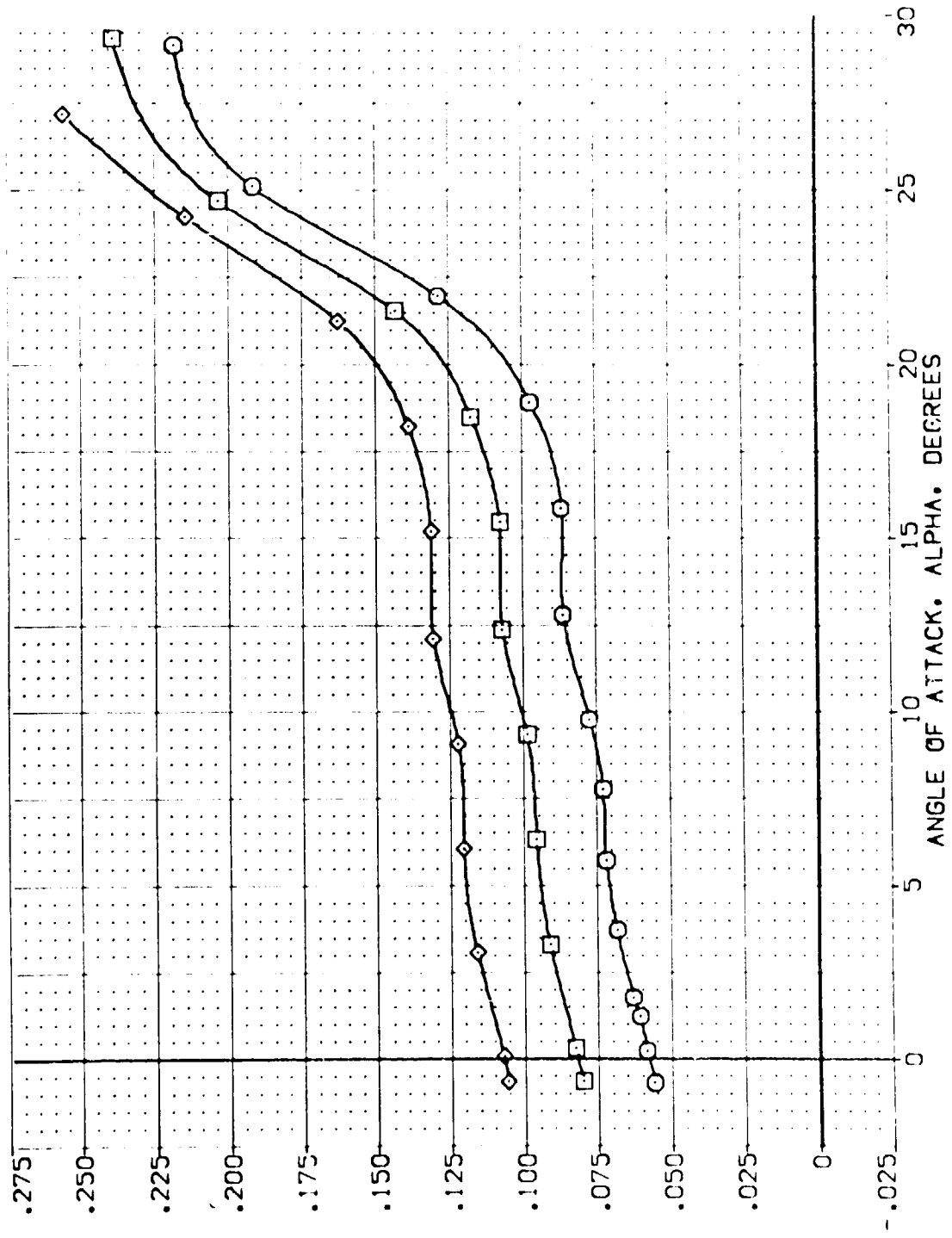


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FIG. 9 SPEEDBRAKE EFFECTS

(B)MACH = .80

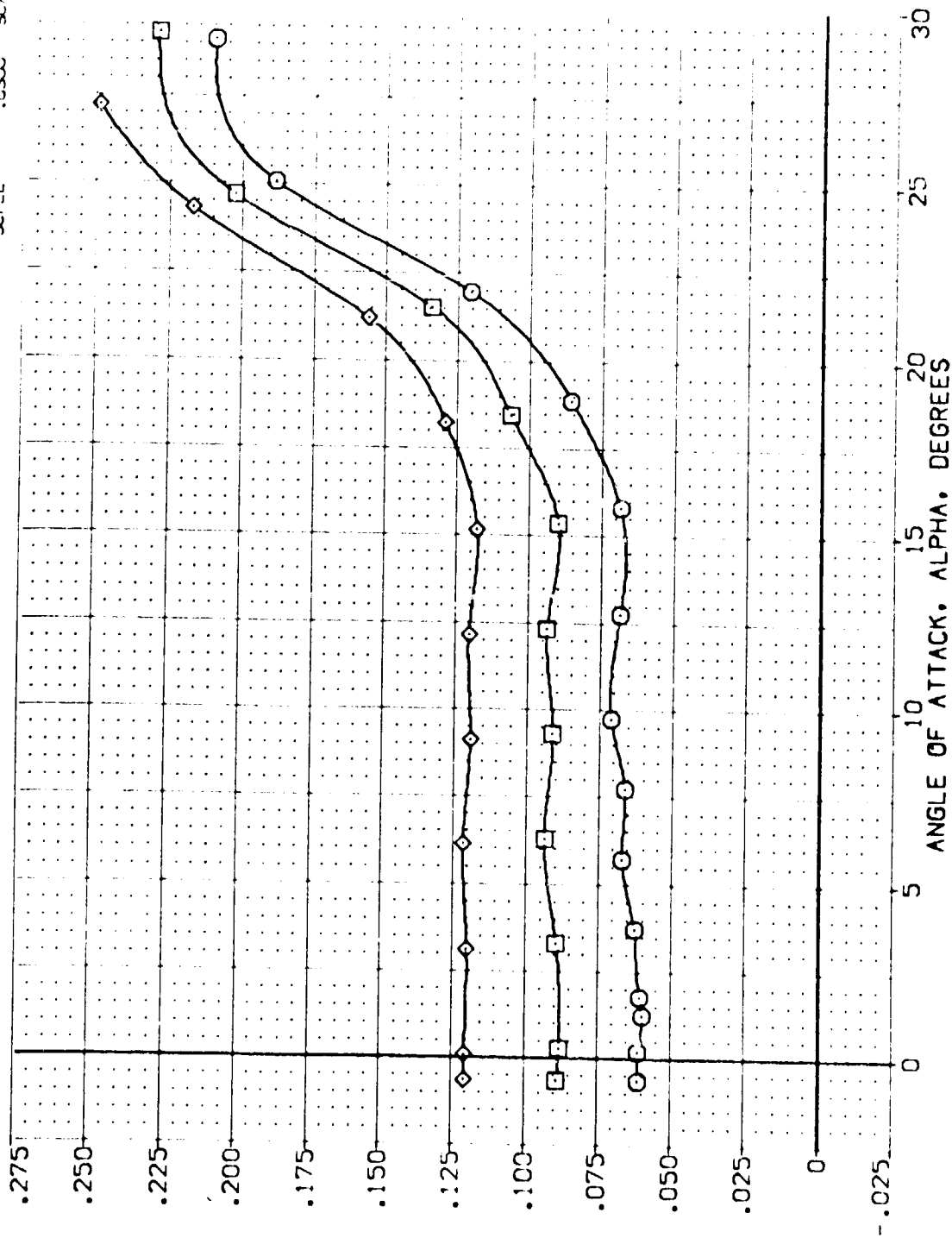


PITCHING MOMENT COEFFICIENT (CFT C.G.), CLMAFT

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPODBRK	REFERENCE INFORMATION:
(TEJ011)	ARC 11-747 CA53A B C H F V I	.000	.000	-11.700	25.000	SREF 2.4210 SC.FT.
(TEJ024)	ARC 11-747 CA53A B C H F V I	.000	.000	-11.700	55.000	LREF 14.2440
(TEJ038)	ARC 11-747 CA53A B C H F V I	.000	.000	-11.700	85.000	BREF 28.1004
						XREF 32.3010
						YREF 0.0000
						ZREF 11.2500
						SCALE 0.0000

DATA SET SYMBOL    CONFIGURATION DESCRIPTION    ELEVON    AILERON    BOFLAP    SPEEDBRK    REFERENCE INFORMATION

(TEJ011)	ARC 11-747 DA53A B C M F VI V	.000	.000	-11.700	75.000	SREF 2.4210 50.17
(TEJ024)	ARC 11-747 DA53A B C M F VI V	.000	.000	-11.700	55.000	LREF 14.2440 17
(TEJ038)	ARC 11-747 DA53A B C M F VI V	.000	.000	-11.700	85.000	BREF 28.1004 17
						XMRP 32.3010 17
						YMRP .0000 17
						ZMRP 11.2500 17
						SCALE .0300 17



PITCHING MOMENT COEFFICIENT (Cm) C.G., CLMAFT

FIG. 9 SPEEDBRAKE EFFECTS

(C)MACH = .90



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVATION	AILERON	BOFLAP	SPOBRK	REFERENCE INFORMATION
(TEJ011)	ARC 11-747 BASSA B C M F VI V	.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(TEJ024)	ARC 11-747 BASSA B C M F VI V	.000	.000	-11.700	55.000	LREF 14.2440
(TEJ038)	ARC 11-747 BASSA B C M F VI V	.000	.000	-11.700	85.000	BREF 28.1004
						YREF 32.3010
						ZREF .0000
						SCALE 11.2500
						SCALE .0300

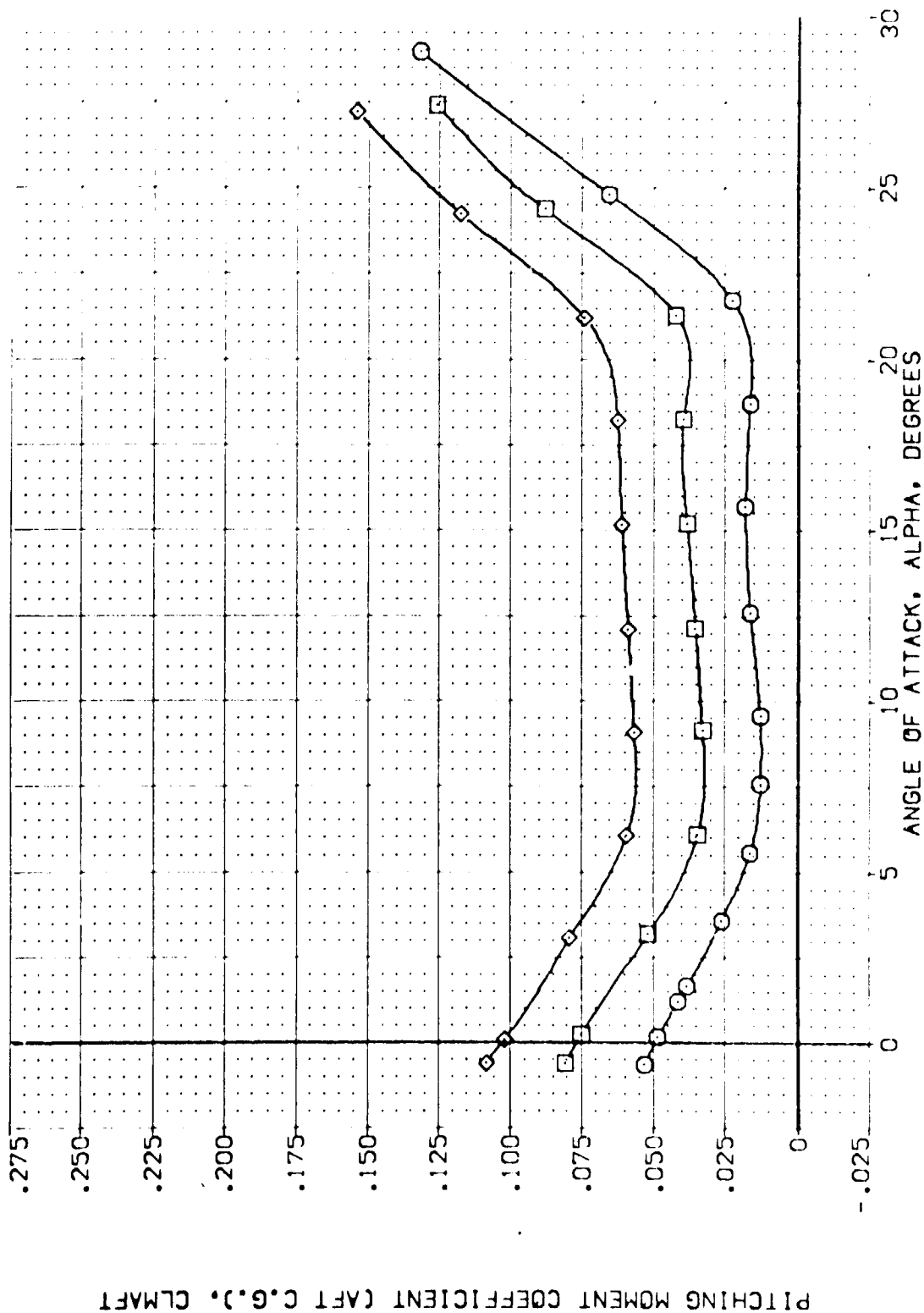


FIG. 9 SPEEDBRAKE EFFECTS

(M)MACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPD BRK	REFERENCE INFORMATION
{TEJ011}	ARC 11-747 D453A B C M F V1 V	.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
{TEJ024}	ARC 11-747 D453A B C M F V1 V	.000	.000	-11.700	55.000	LREF 14.2440 IN.
{TEJ038}	ARC 11-747 D453A B C M F V1 V	.000	.000	-11.700	85.000	BREF 28.1004 IN.
						XMRP 32.9010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

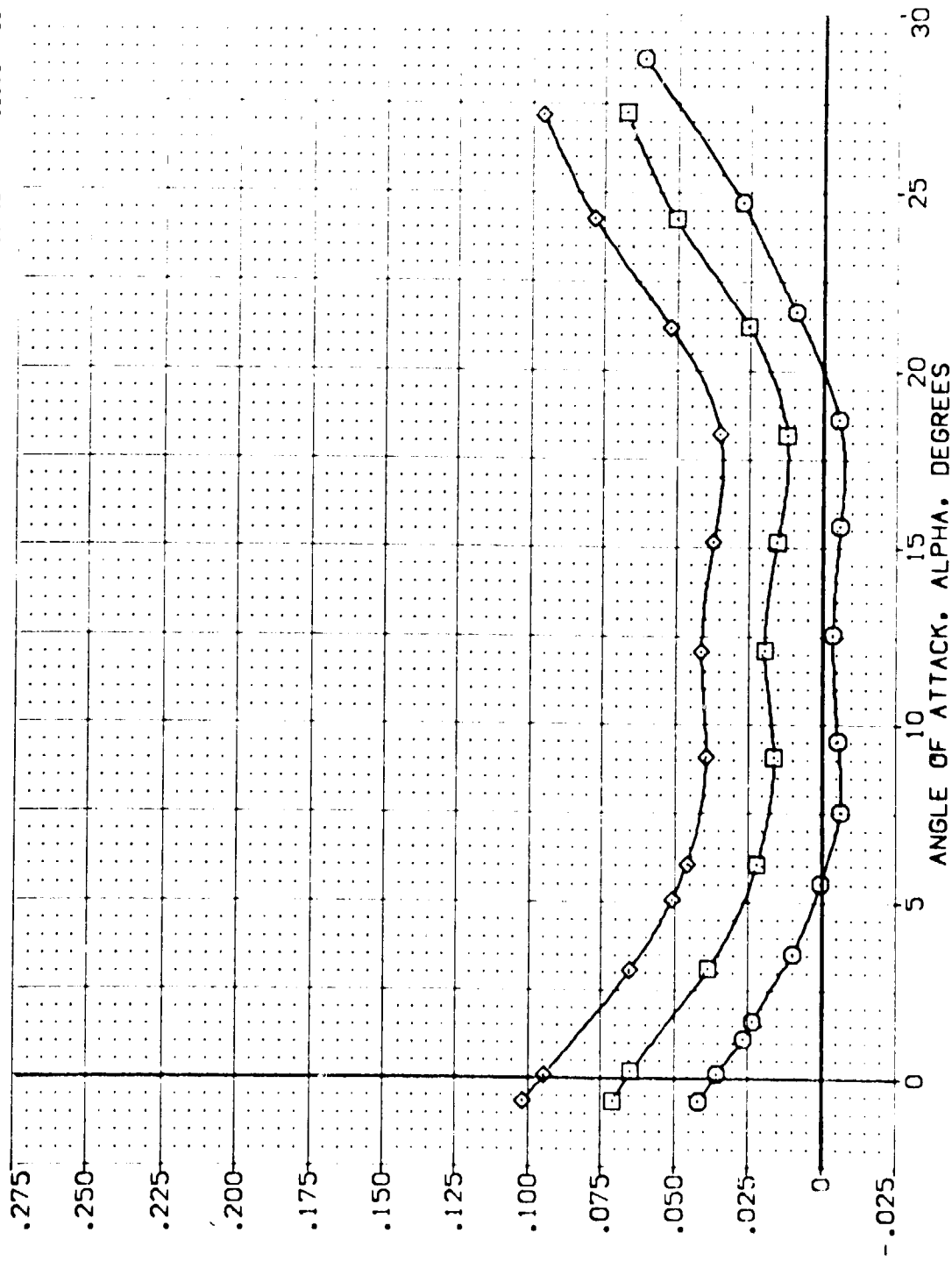


FIG. 9 SPEEDBRAKE EFFECTS

(MACH = 1.20)



DATA SET SYMBOL: (TEJ011), (TEJ024), (TEJ038)

CONFIGURATION DESCRIPTION: ARC 11-747 DA53A B C M F V, ARC 11-747 DA53A B C M F V, ARC 11-747 DA53A B C M F V

ELEVON: .000, .000, .000

AILERON: .000, .000, .000

BD FLAP: -11.700, -11.700, -11.700

SPOILER: 25.000, 55.000, 85.000

REFERENCE INFORMATION: SREF 2.4210 SQ.FT., LREF 14.2440, BREF 28.1004, YMRP 32.3013, ZMRP .0000, SCALE 11.7500, .0300

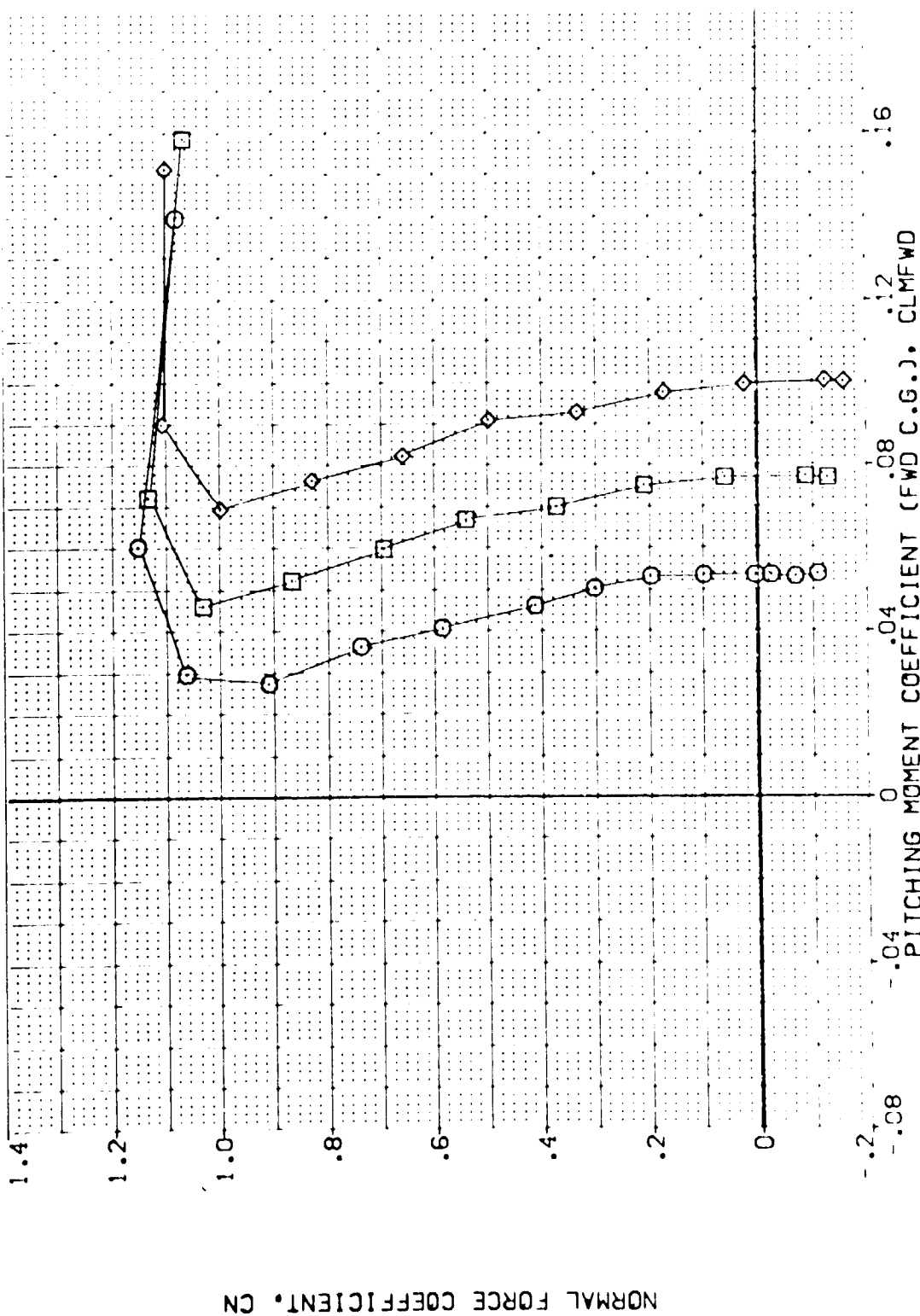


FIG. 9 SPEEDBRAKE EFFECTS

(A) MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPODBRK	REFERENCE INFORMATION
(TEJ011)	ARC 11-747 0A53A B C H F VI V	.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(TEJ024)	ARC 11-747 0A53A B C H F VI V	.000	.000	-11.700	55.000	LREF 14.2440 IN.
(TEJ038)	ARC 11-747 0A53A B C H F VI V	.000	.000	-11.700	85.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

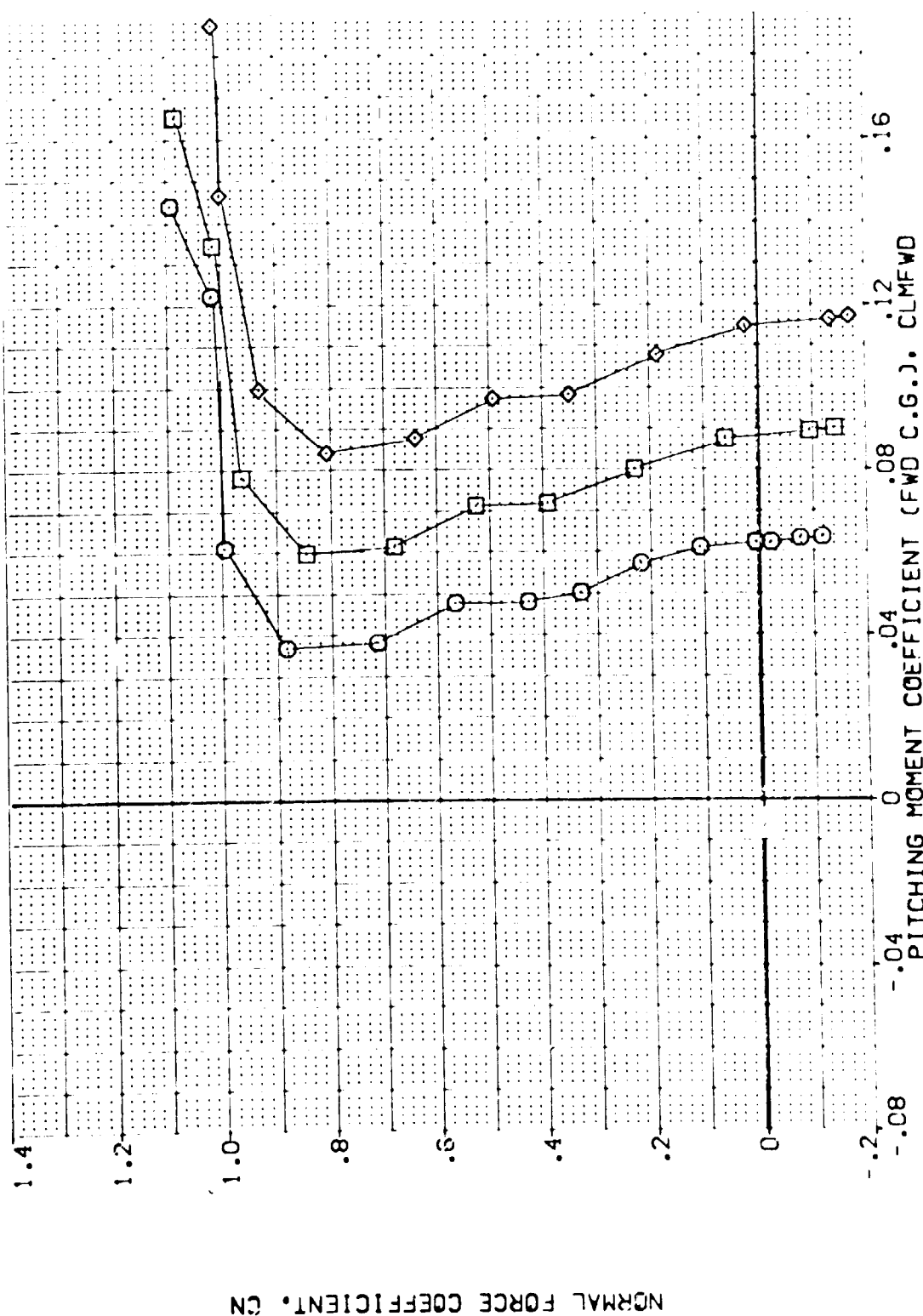


FIG. 9 SPEEDBRAKE EFFECTS

(B) MACH = .80

DATA SET SYMB.	CONFIGURATION DESCRIPTION	ELEVON	AILRON	BD/LAP	SPDRK	REFERENCE INFORMATION
(TEJ011)	ARC 11-747 CAS3A B C H F VI V	.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(TEJ024)	ARC 11-747 CAS3A B C H F VI V	.000	.000	-11.700	55.000	LREF 14.2443 IN.
(TEJ038)	ARC 11-747 CAS3A B C H F VI V	.000	.000	-11.700	85.000	BREF 28.1004 IN.
						XMRD 32.3010 IN.
						YMRD .0000 IN.
						ZMRD 11.2500 IN.
						SCALE .0300

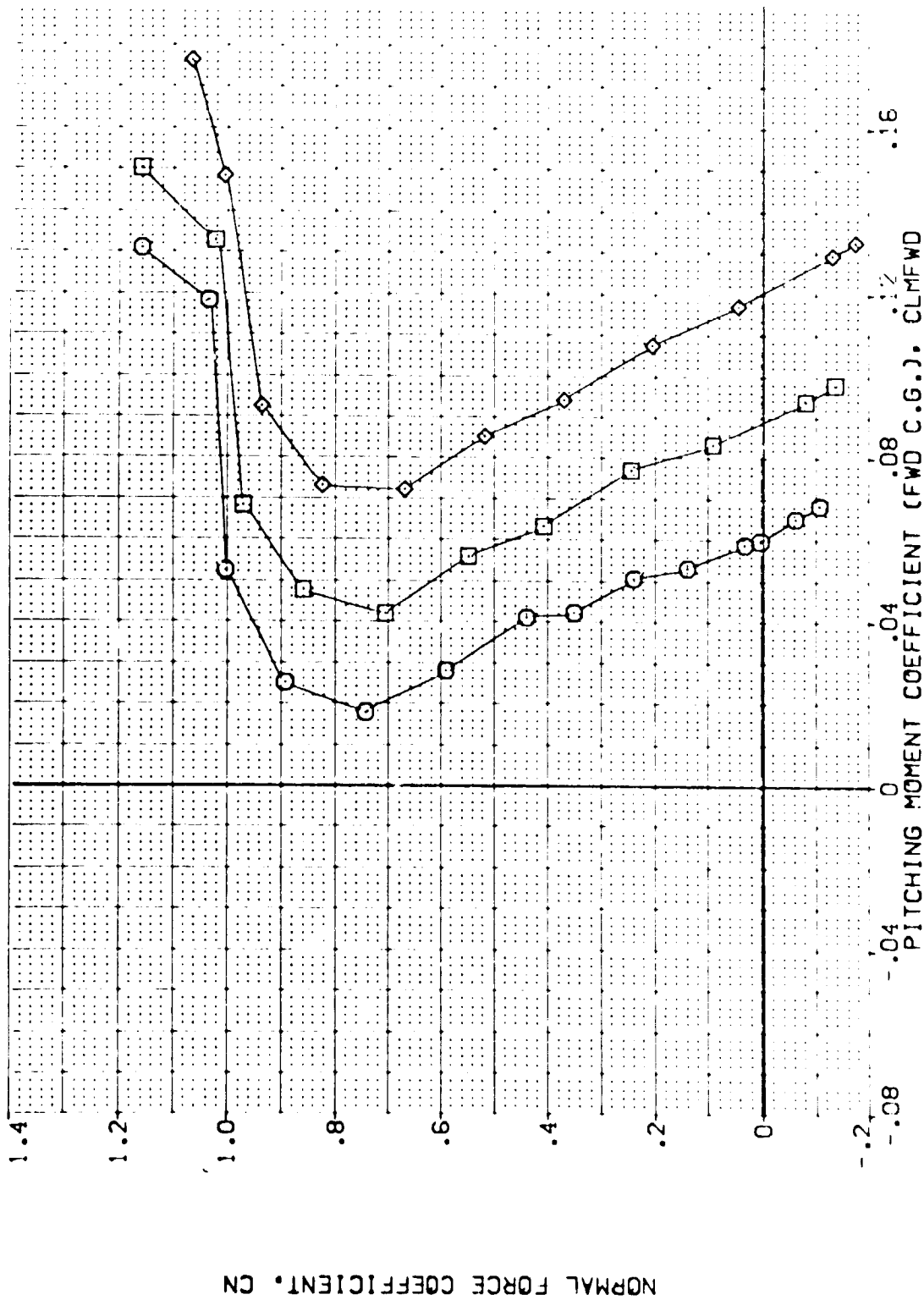


FIG. 9 SPEEDBRAKE EFFECTS

(C)MACH = .90

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVATION	AIRLON	BDF LAP	SPOBRK	REFERENCE INFORMATION
(TEJ011)	○	ARC 11-747 DA53A B C H F VI V	.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(TEJ024)	□	ARC 11-747 DA53A B C H F VI V	.000	.000	-11.700	55.000	LREF 14.2440 IN.
(TEJ038)	◇	ARC 11-747 DA53A B C H F VI V	.000	.000	-11.700	85.000	BREF 28.1004 IN.
							XREF 32.3010 IN.
							YREF .0000 IN.
							ZREF 11.2500 IN.
							SCALE .0300

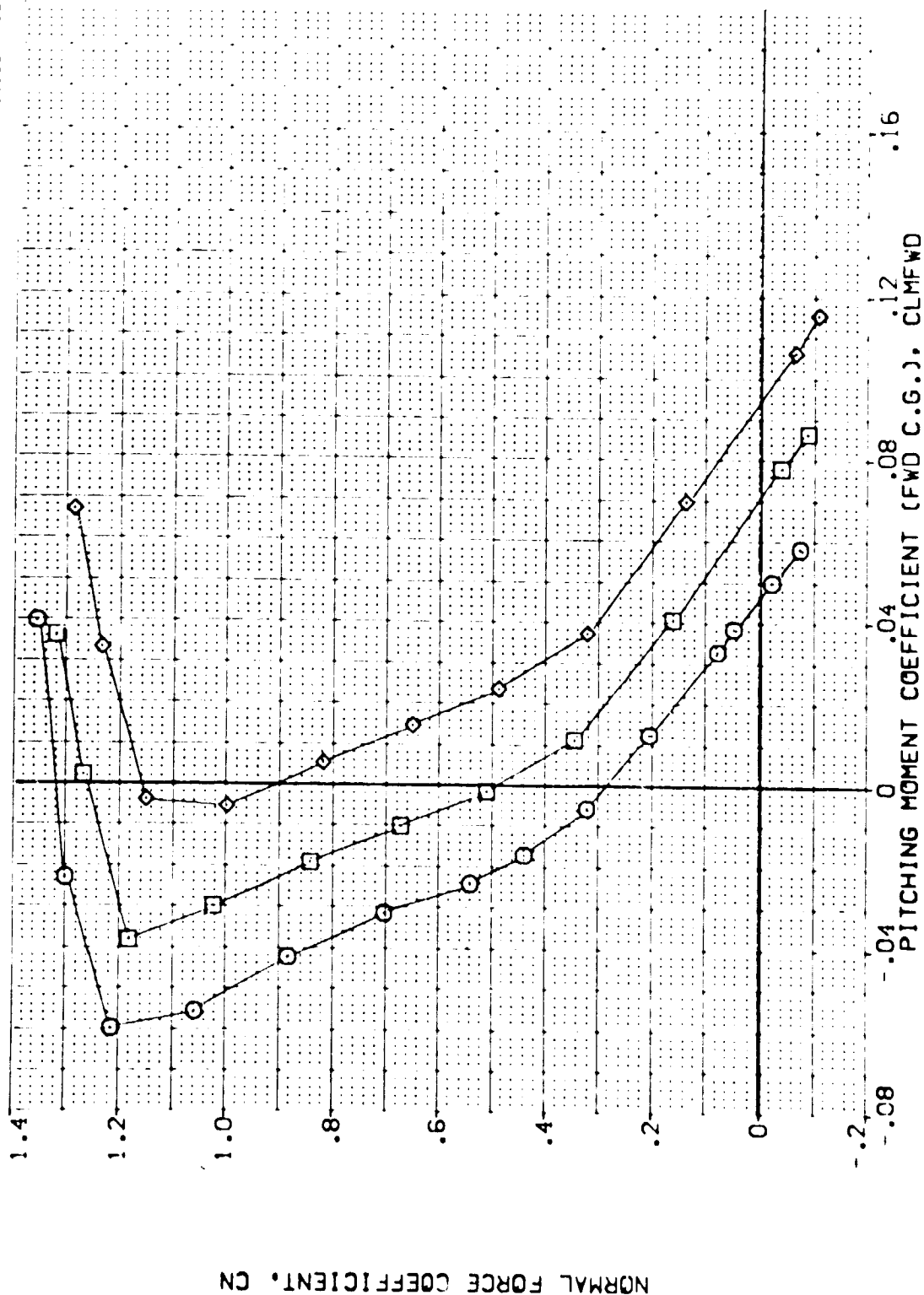


FIG. 9 SPEEDBRAKE EFFECTS

(C)MACH = 1.05

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(TEJ011) ARC 11-747 DASSA B C M F V V

(TEJ024) ARC 11-747 DASSA B C M F V V

(TEJ038) ARC 11-747 DASSA B C M F V V

NON. RUL

NON. RUL

NON. RUL

ELEVON

.000

.000

.000

AILRON

.000

.000

.000

BD FLAP

-11.700

-11.700

-11.700

SPEEDBRK

25.000

50.000

65.000

REFERENCE INFORMATION

SREF 2.4210

LREF 14.2440

BREF 23.1004

YREF 32.3010

ZREF 11.0000

SCALE 11.0300

SCALE 50.17

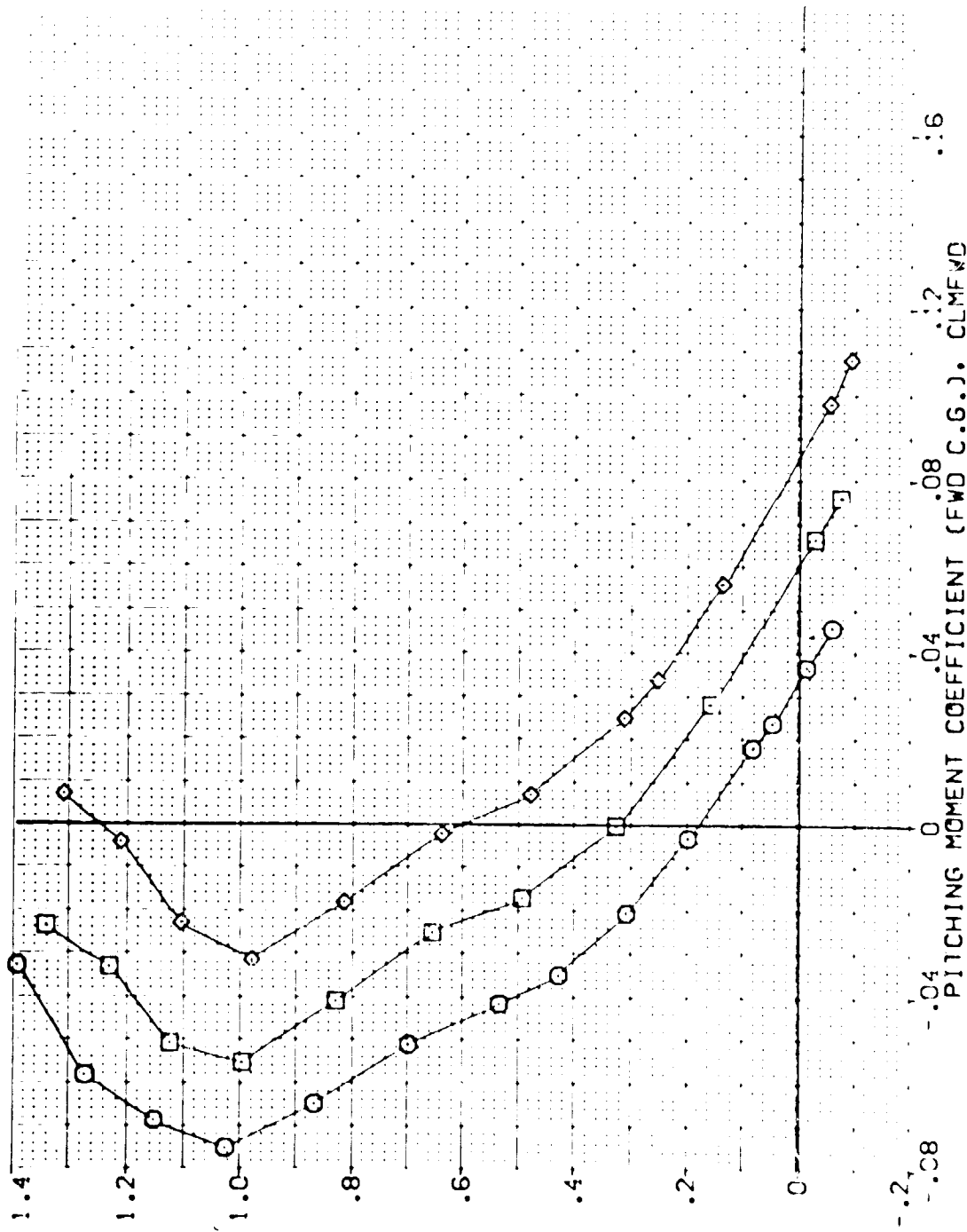


FIG. 9 SPEEDBRAKE EFFECTS

(C) "AC" = 1.20



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BD/LAP	SPOBRK	REFERENCE INFORMATION
{TEJ011}	ARC 11-747 BAS3A B C M F V1 V	.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
{TEJ024}	ARC 11-747 BAS3A B C M F V1 V	.000	.000	-11.700	55.000	LREF 14.2440 IN.
{TEJ038}	ARC 11-747 BAS3A B C M F V1 V	.000	.000	-11.700	65.000	BREF 28.1004 IN.
						YMRP 32.3010 IN.
						ZMRP 11.7500 IN.
						SCALE .0300

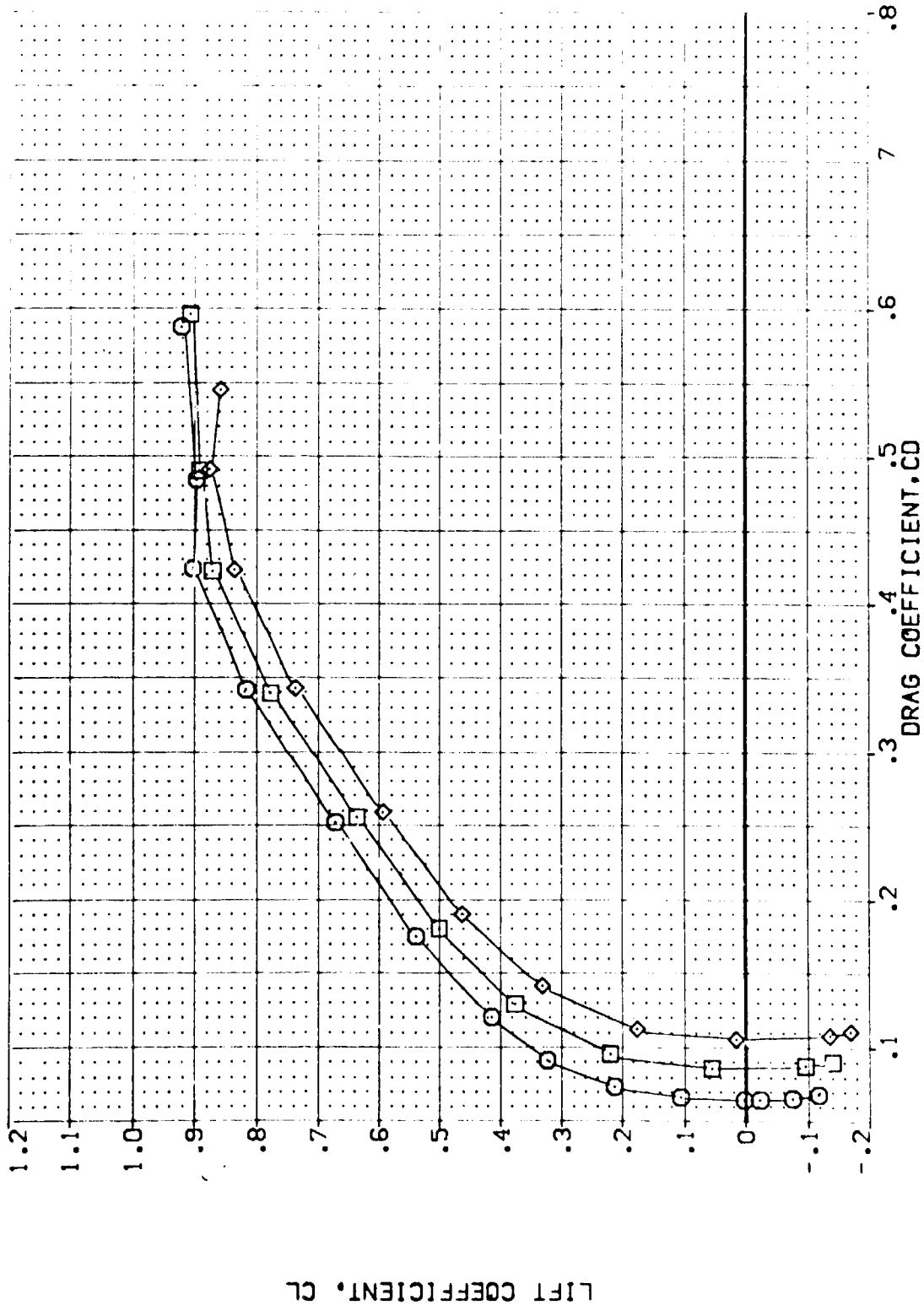


FIG. 9 SPEEDBRAKE EFFECTS

(B) MACH = .80



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPODBRK	REFERENCE INFORMATION	
[TEJ011]	ARC 11-747 QAS3A B C M F V1 V	.000	.000	-11.700	25.000	SREF	2.4210 SQ.FT.
[TEJ024]	ARC 11-747 QAS3A B C M F V1 V	.000	.000	-11.700	55.000	LREF	14.2440 IN.
[TEJ038]	ARC 11-747 QAS3A B C M F V1 V	.000	.000	-11.700	85.000	BREF	28.1004 IN.
						XMRP	32.3010 IN.
						YMRP	.0000 IN.
						ZMRP	11.2500 IN.
						SCALE	.0300

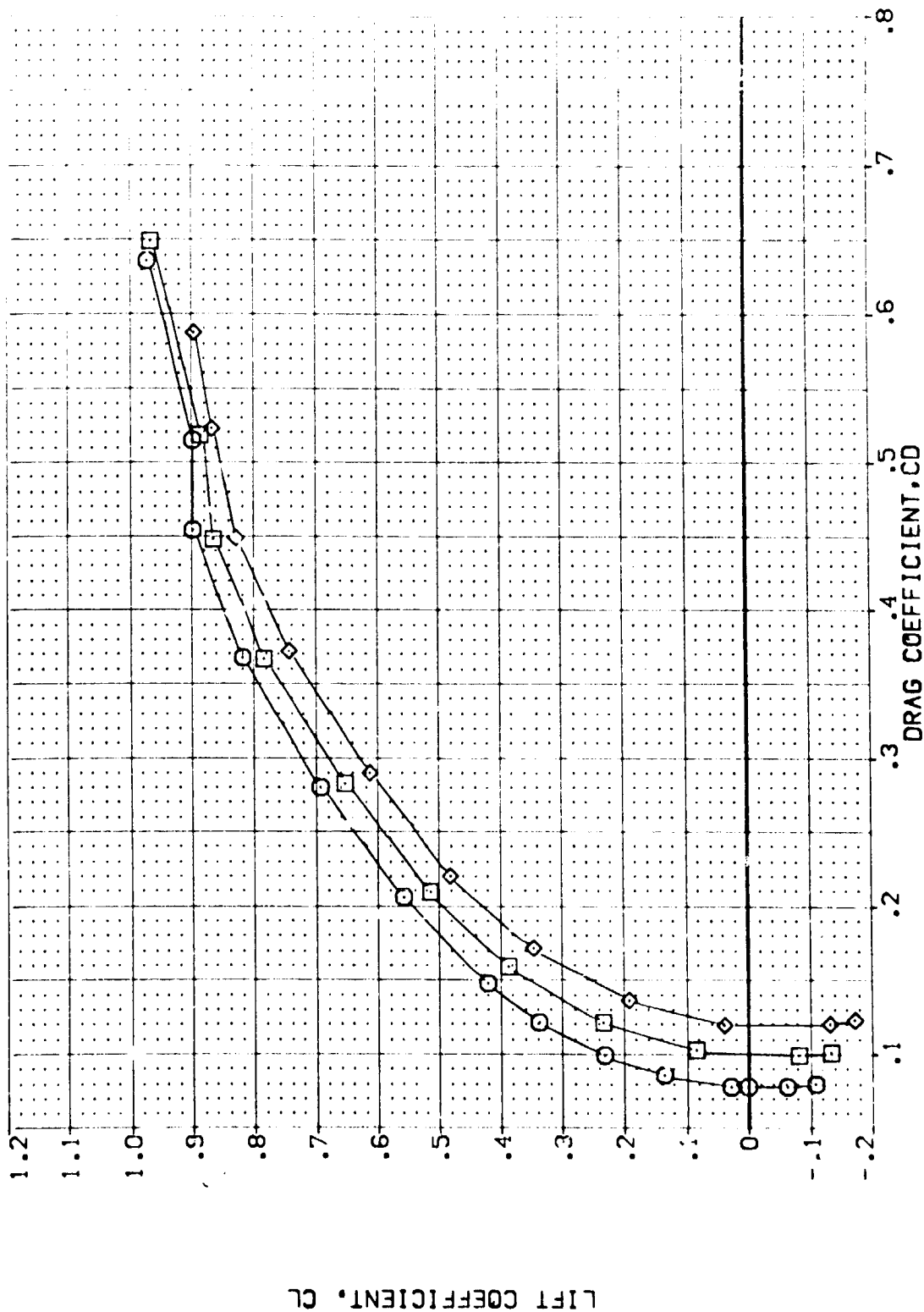


FIG. 9 SPEEDBRAKE EFFECTS

[CJMACH = .90



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	BOFLAP	SPDBRK	REFERENCE INFORMATION
[TEJ011]	ARC 11-747 CAS3A B C H F VI V	.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[TEJ024]	ARC 11-747 CAS3A B C H F VI V	.000	.000	-11.700	55.000	LREF 14.2440 IN.
[TEJ038]	ARC 11-747 CAS3A B C H F VI V	.000	.000	-11.700	85.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

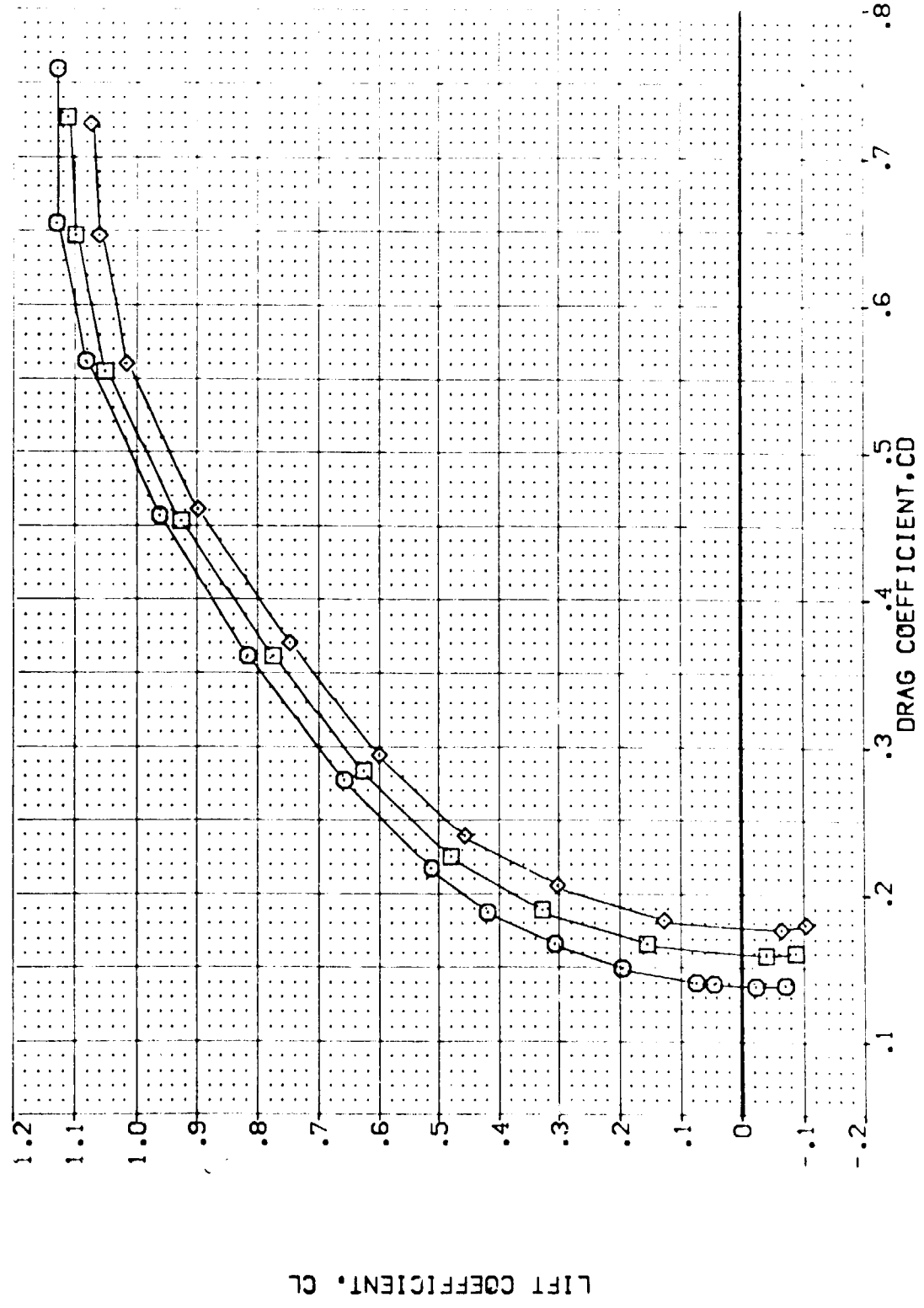


FIG. 9 SPEEDBRAKE EFFECTS

(D)MACH = 1.05



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPOBRK	REFERENCE INFORMATION
(TEJ011)	ARC 11-747 0A53A B C M F V1 V	.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(TEJ024)	ARC 11-747 0A53A B C M F V1 V	.000	.000	-11.700	55.000	LREF 14.2440 IN.
(TEJ038)	ARC 11-747 0A53A B C M F V1 V	.000	.000	-11.700	85.000	BREF 28.1004 IN.
						YMRP 32.3010 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

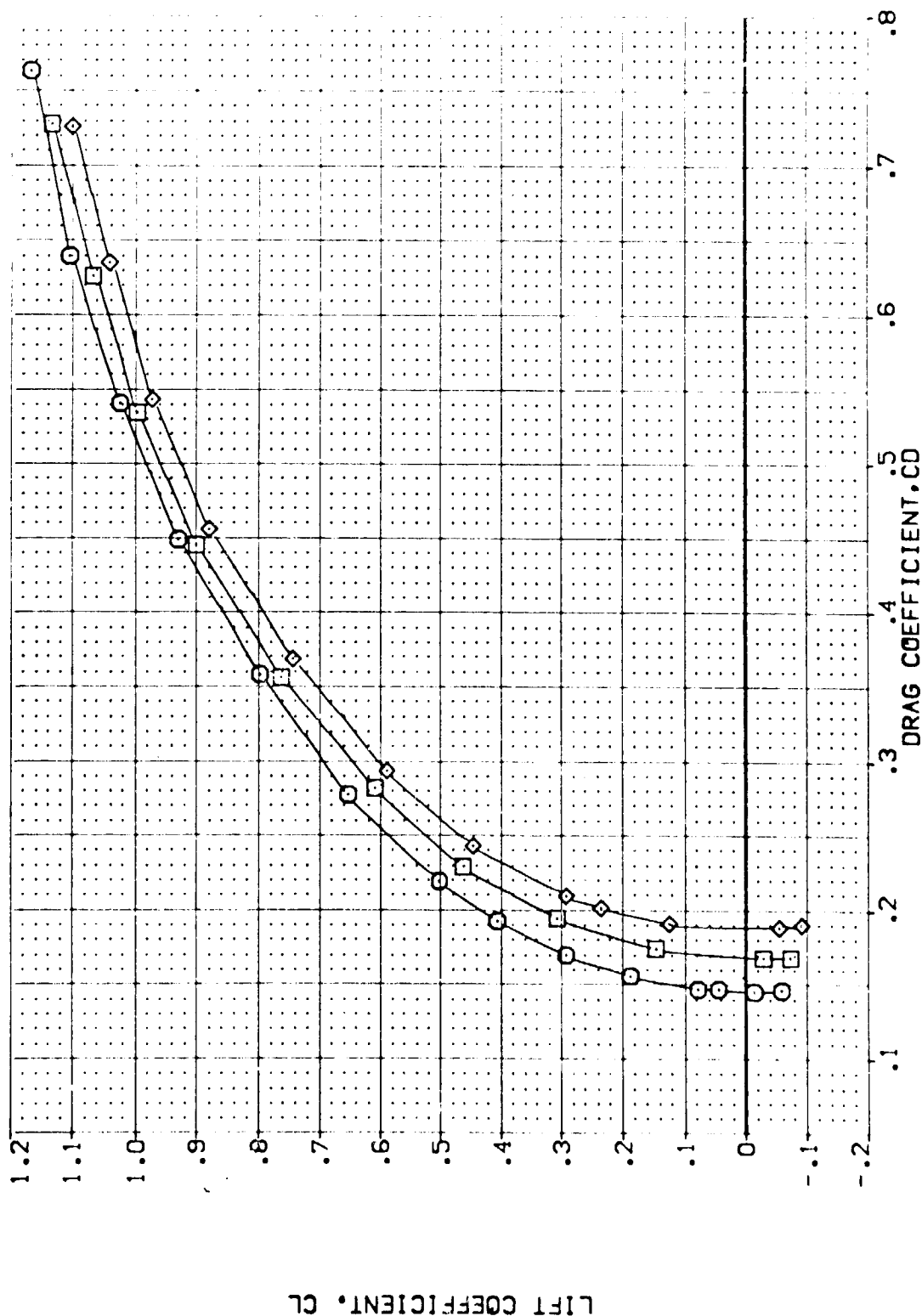


FIG. 9 SPEEDBRAKE EFFECTS

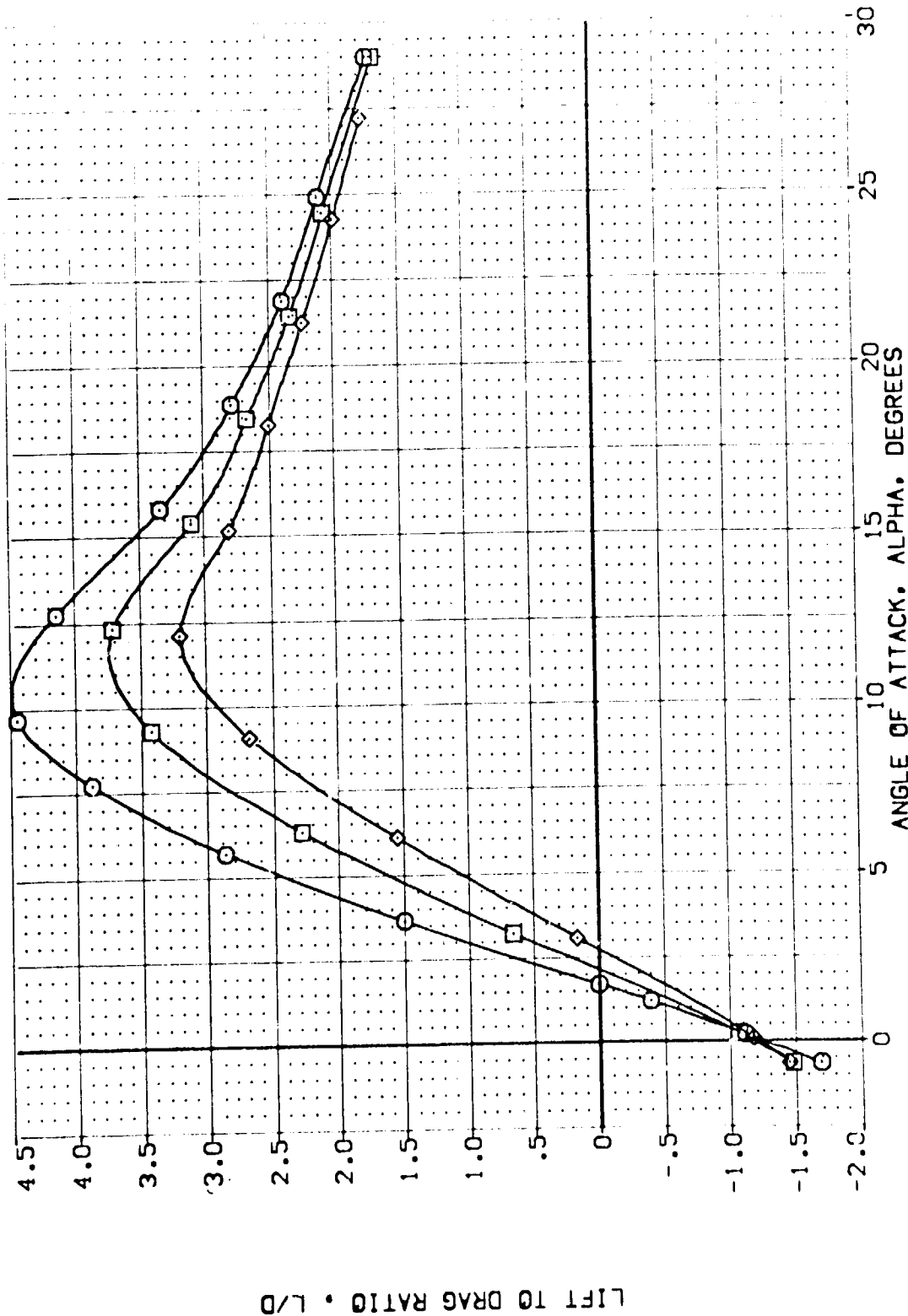
(CD)MACH = 1.20



FIG. 9 SPEEDBRAKE EFFECTS

(A)MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	BD/LAP	SPDRBK	REFERENCE INFORMATION
{TEJ011}	ARC 11-747 0A53A B C M F VI V	.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
{TEJ024}	ARC 11-747 0A53A B C M F VI V	.000	.000	-11.700	55.000	LREF 14.2440 IN.
{TEJ038}	ARC 11-747 0A53A B C M F VI V	.000	.000	-11.700	85.000	BREF 28.1004 IN.
						XMREF 32.3010 IN.
						YMREF .0000 IN.
						ZMREF 11.2500 IN.
						SCALE .0300



LIFT TO DRAG RATIO • L/D

DATA SET SYMBOL CONFIGURATION DESCRIPTION

ARC 11-747 DA53A B C H F VI V

ARC 11-747 DA53A B C H F VI V

ARC 11-747 DA53A B C H F VI V

NOM. RV/L

NOM. RV/L

NOM. RV/L

ELEVON

AILERON

BOF LAP

SPOBRK

REFERENCE INFORMATION

SREF 2.4210 SQ. FT.

LREF 14.2440 IN.

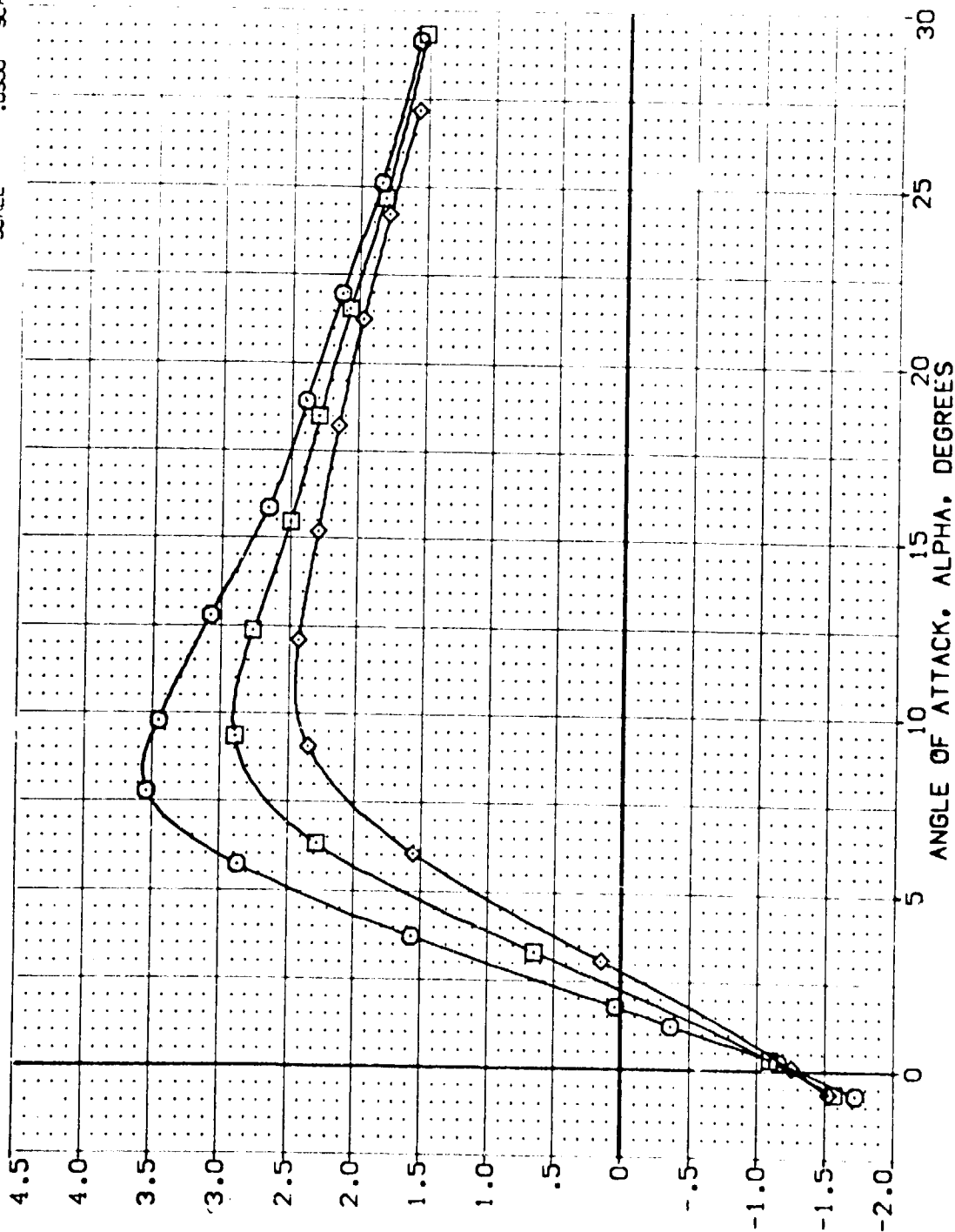
BREF 28.1004 IN.

XMRP 32.5010 IN.

YMRP .0000 IN.

ZMRP 11.2500 IN.

SCALE .0300



LIFT TO DRAG RATIO, L/D

FIG. 9 SPEEDBRAKE EFFECTS

(B)MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPOBRK	REFERENCE INFORMATION
[TEJ011]	ARC 11-747 DA53A B C M F V1 V	.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[TEJ074]	ARC 11-747 DA53A B C M F V1 V	.000	.000	-11.700	55.000	LREF 14.2440 IN.
[TEJ038]	ARC 11-747 DA53A B C M F V1 V	.000	.000	-11.700	65.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP 11.0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

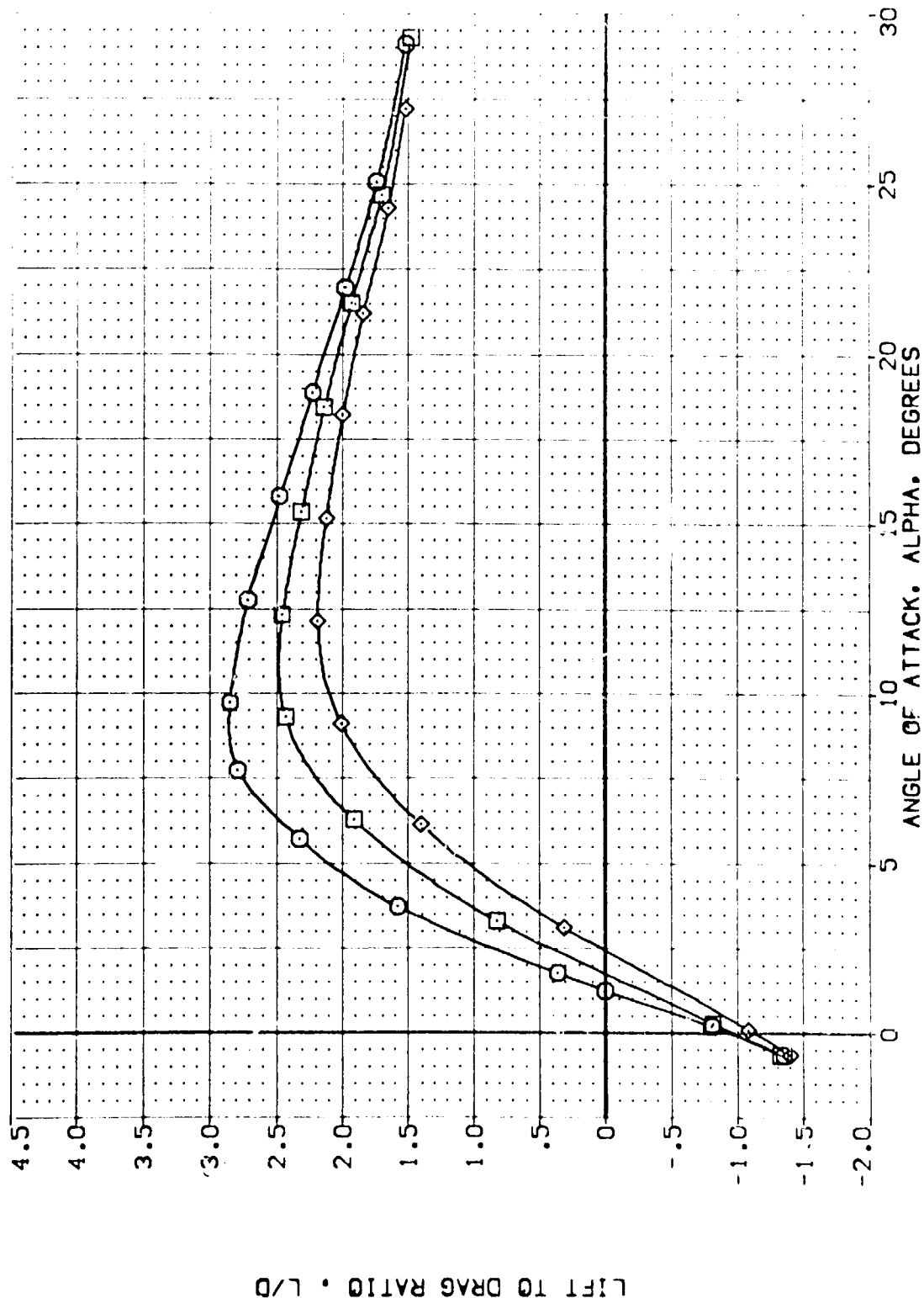


FIG. 9 SPEEDBRAKE EFFECTS

(C)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	A/LRDN	BDFLAP	SPOBRK	REFERENCE INFORMATION
(TEJ011)	ARC 11-747 OAS3A B C M F VI V	.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(TEJ024)	ARC 11-747 OAS3A B C M F VI V	.000	.000	-11.700	55.000	LREF 14.2440 IN.
(TEJ038)	ARC 11-747 OAS3A B C M F VI V	.000	.000	-11.700	65.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2570 IN.
						SCALE .0300

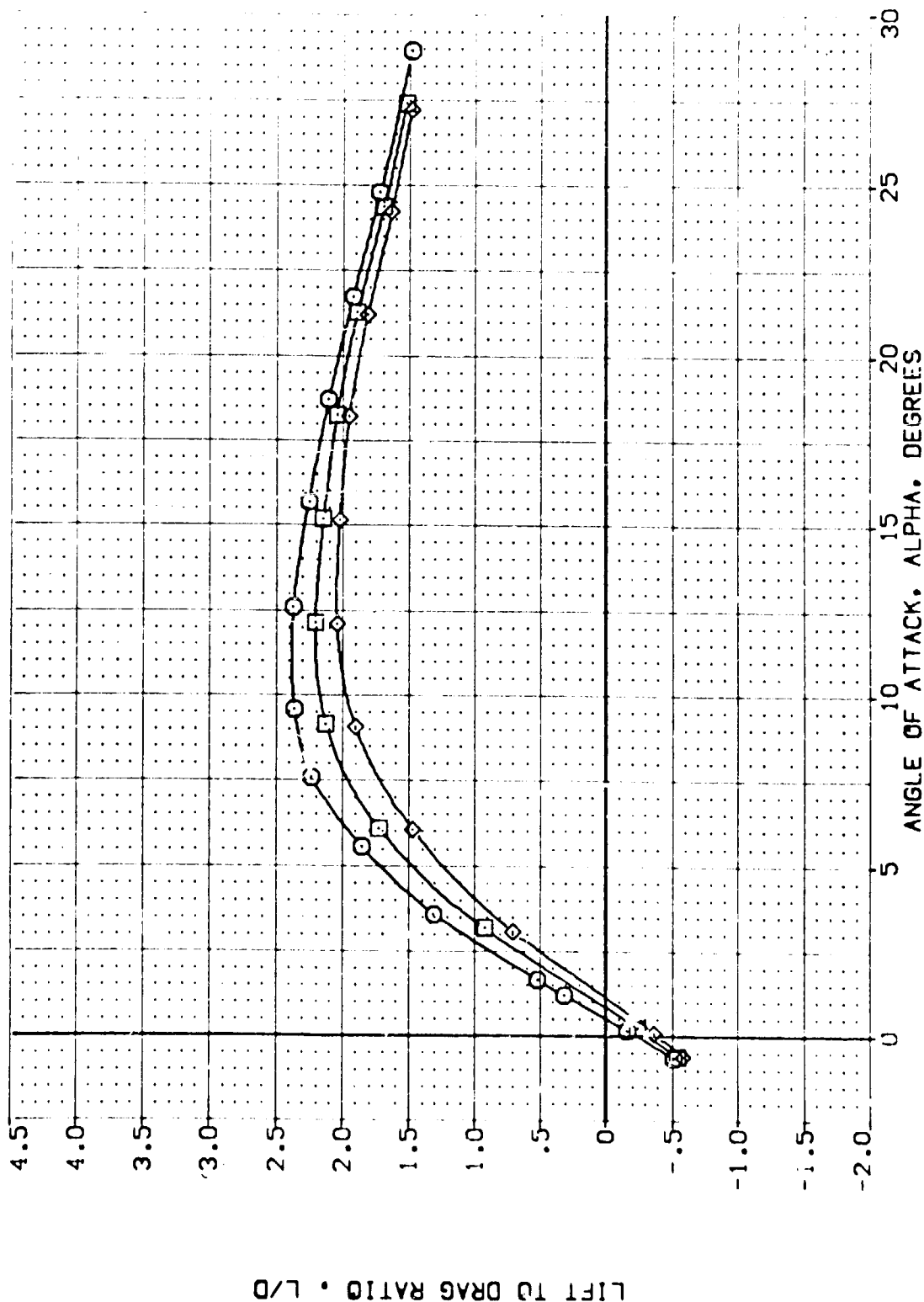


FIG. 9 SPEEDBRAKE EFFECTS

(D)MACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BD FLAP	SYDBRK	REFERENCE INFORMATION
[TEJ011]	ARC 11-747 OAS3A B C H F VI V	.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[TEJ024]	ARC 11-747 OAS3A B C H F VI V	.000	.000	-11.700	53.000	LREF 14.2440 IN.
[TEJ038]	ARC 11-747 OAS3A B C H F VI V	.000	.000	-11.700	85.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						ZMRP .0000 IN.
						SCALE 11.2500 IN.
						SCALE .0300

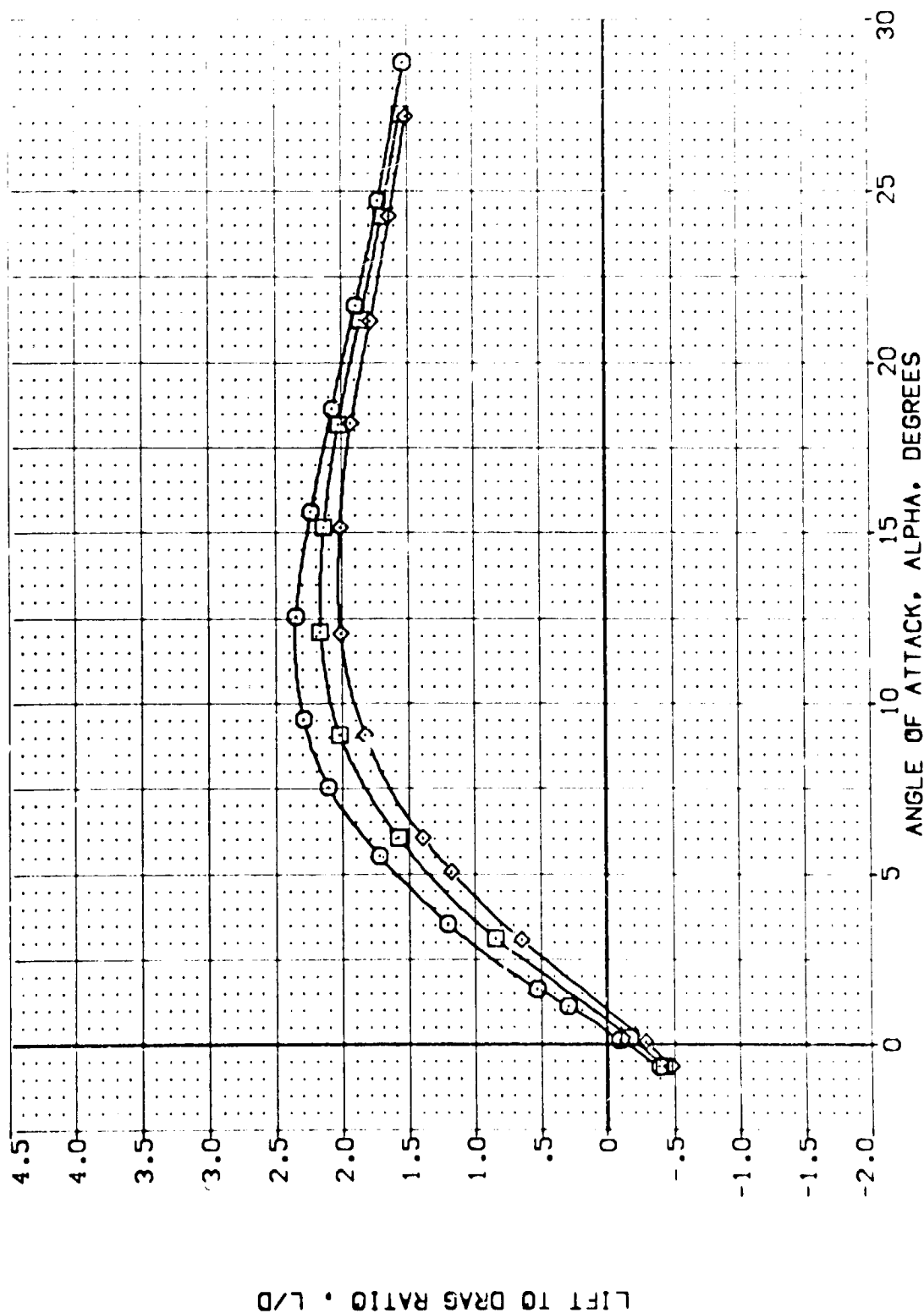


FIG. 9 SPEEDBRAKE EFFECTS

(C)MACH = 1.20

DATA SET SYMBOL CONFIGURATION DESCRIPTION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPODBRK	REFERENCE INFORMATION
(AEJ011)	ARC 11-747 CA53A B C M F V1	.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(AEJ024)	ARC 11-747 CA53A B C M F V1	.000	.000	-11.700	55.000	LREF 14.2440 IN.
(AEJ038)	ARC 11-747 CA53A B C M F V1	.000	.000	-11.700	85.000	BREF 28.1004 IN.
						YMRP 32.3010 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

LONGITUDINAL CENTER OF PRESSURE/BODY LENGTH, XCP/L

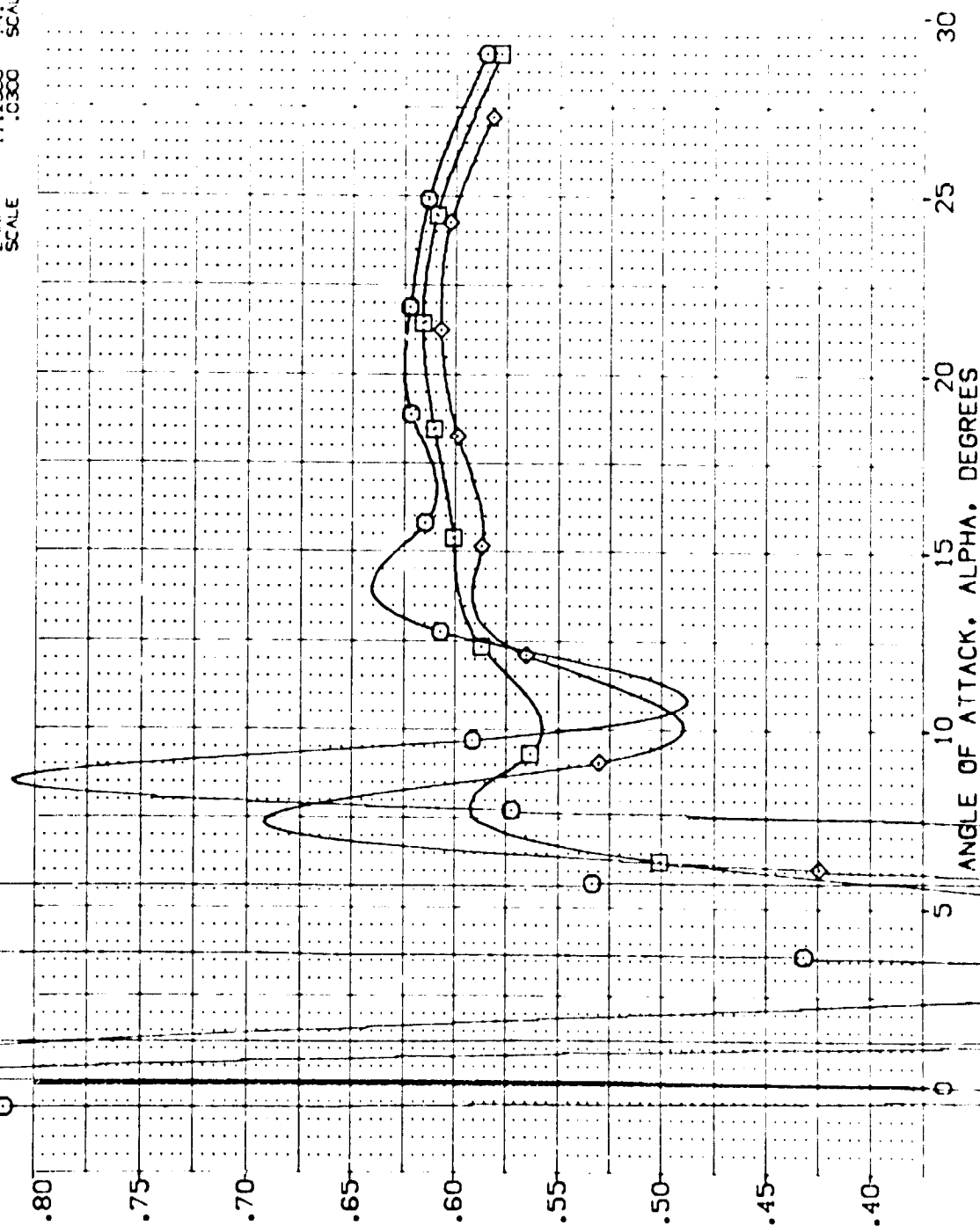


FIG. 9 SPEEDBRAKE EFFECTS

(A) MACH = 1.60



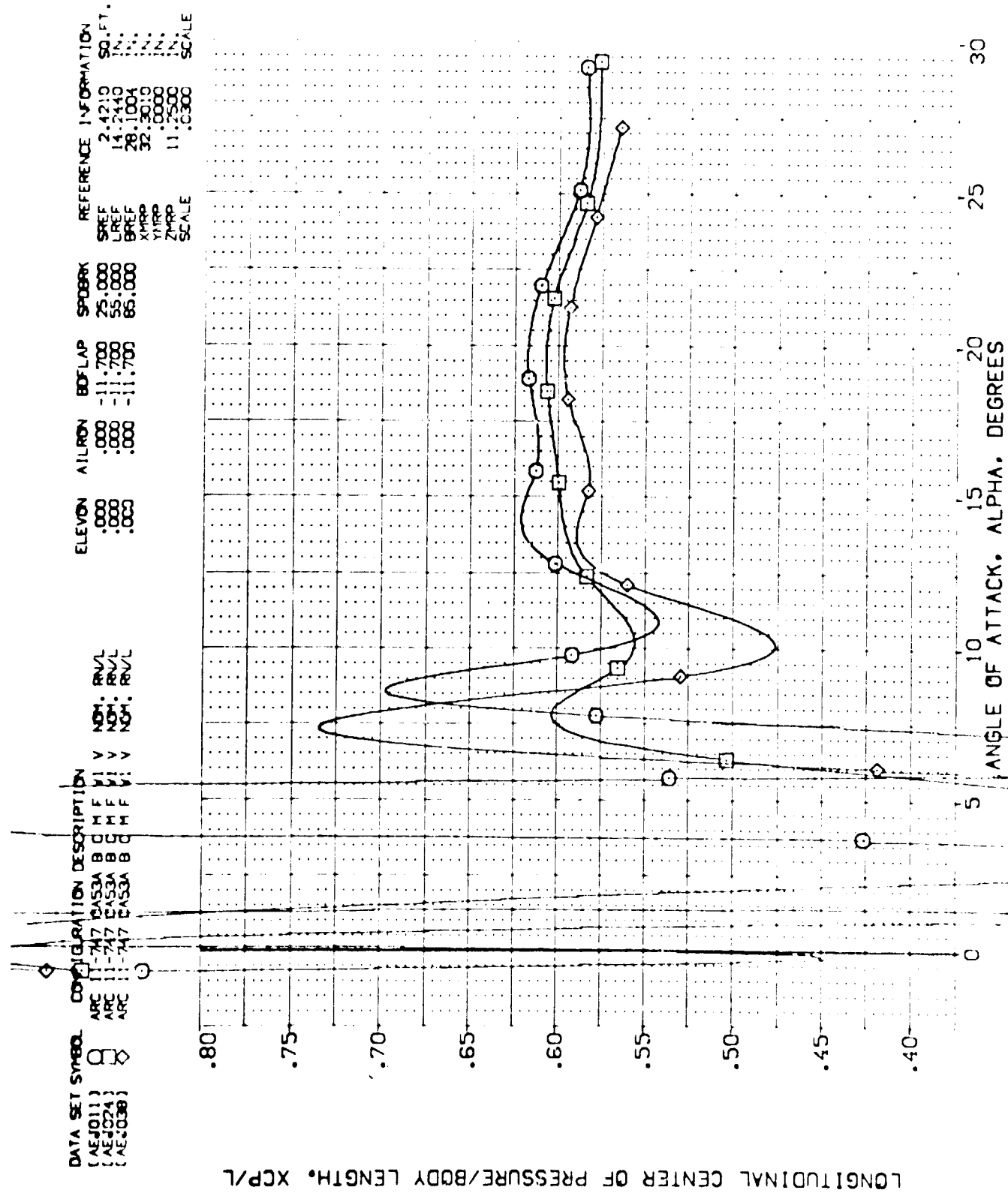


FIG. 9 SPEEDBRAKE EFFECTS

(B) MACH = .83

DATA SET SYMBOL CONFIGURATION DESCRIPTION ELEVON AILERON BOFLAP SPOBRK REFERENCE INFORMATION

[AEJ011] ARC 11-747 CAS3A B C H F VI V NON: RV/L SQ. FT.

[AEJ024] ARC 11-747 CAS3A B C H F VI V NON: RV/L 2.4210

[AEJ038] ARC 11-747 CAS3A B C H F VI V NON: RV/L 14.2440

28.1004

32.3010

0.0000

11.7500

0.0000

11.0000

SCALE

LONGITUDINAL CENTER OF PRESSURE/BODY LENGTH, XCP/L

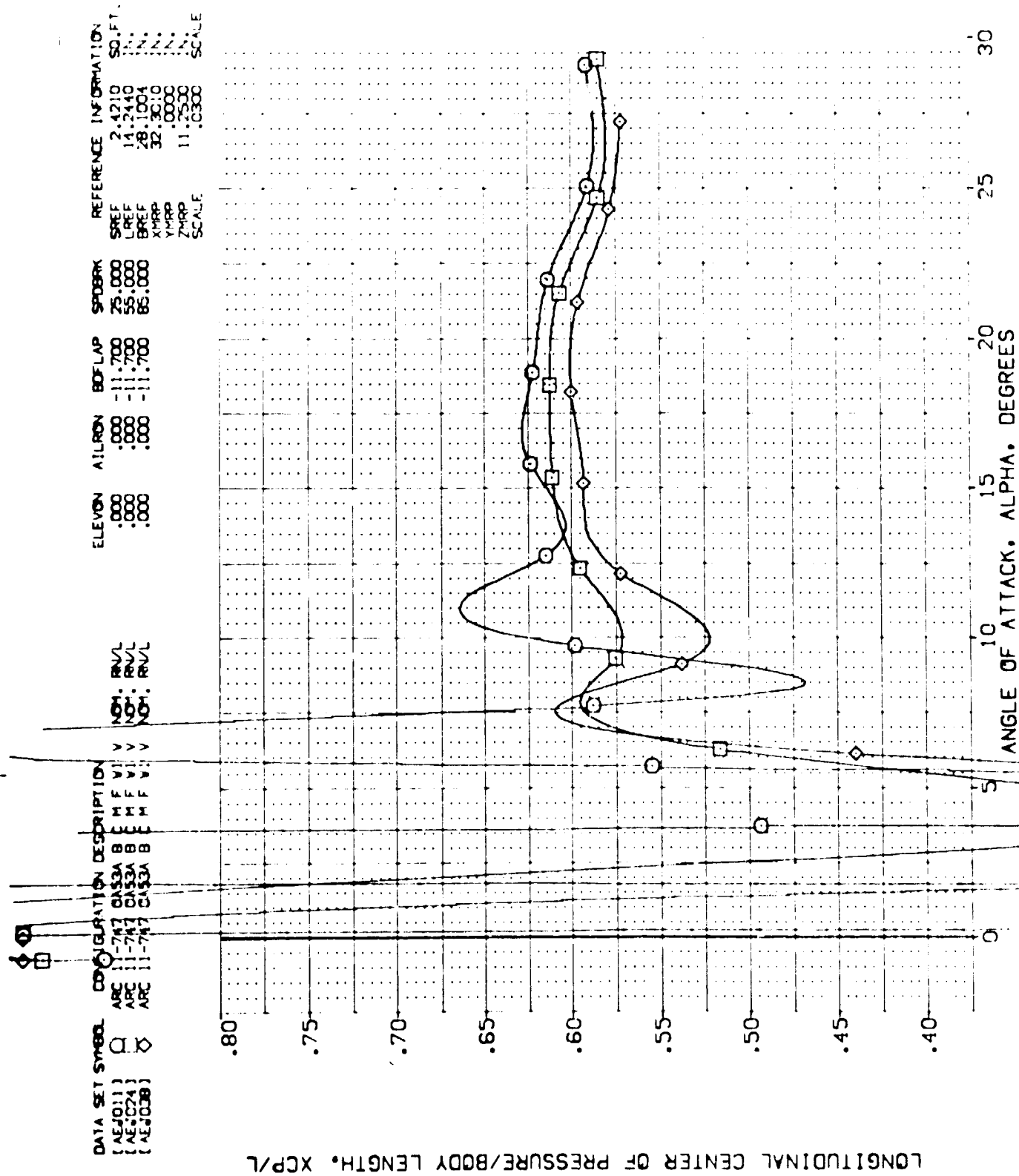


FIG. 9 SPEEDBRAKE EFFECTS

$$= \frac{1}{2} \log \frac{1}{1 - \frac{1}{2} \log 2}$$

DATA SET SYMBOL	CONFIGURATION	DESCRIPTION	ELEVATION	ANGLE OF ATTACK	SPD BRK	REFERENCE INFORMATION
[AEJ011]	ARC 11-747	B C M F V	.000	0	25.000	SPREF 2.4210 50. FT.
[AEJ024]	ARC 11-747	B C M F V	.000	5	55.000	LRREF 14.2440
[AEJ038]	ARC 11-747	B C M F V	.000	10	85.000	BRREF 28.1004
						XRREF 32.3010
						YMRP 11.0000
						ZMRP 11.2500
						SCALE .0300

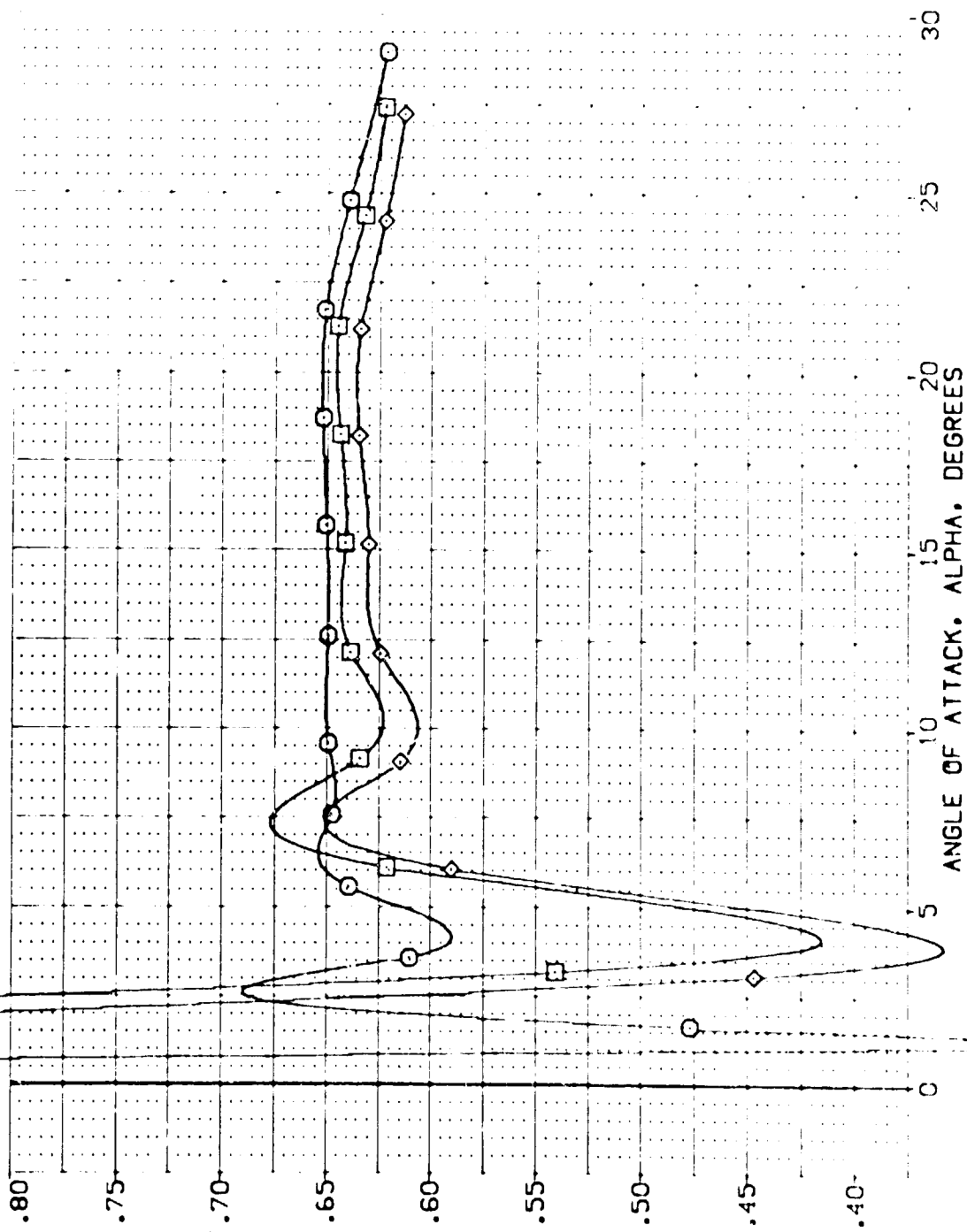
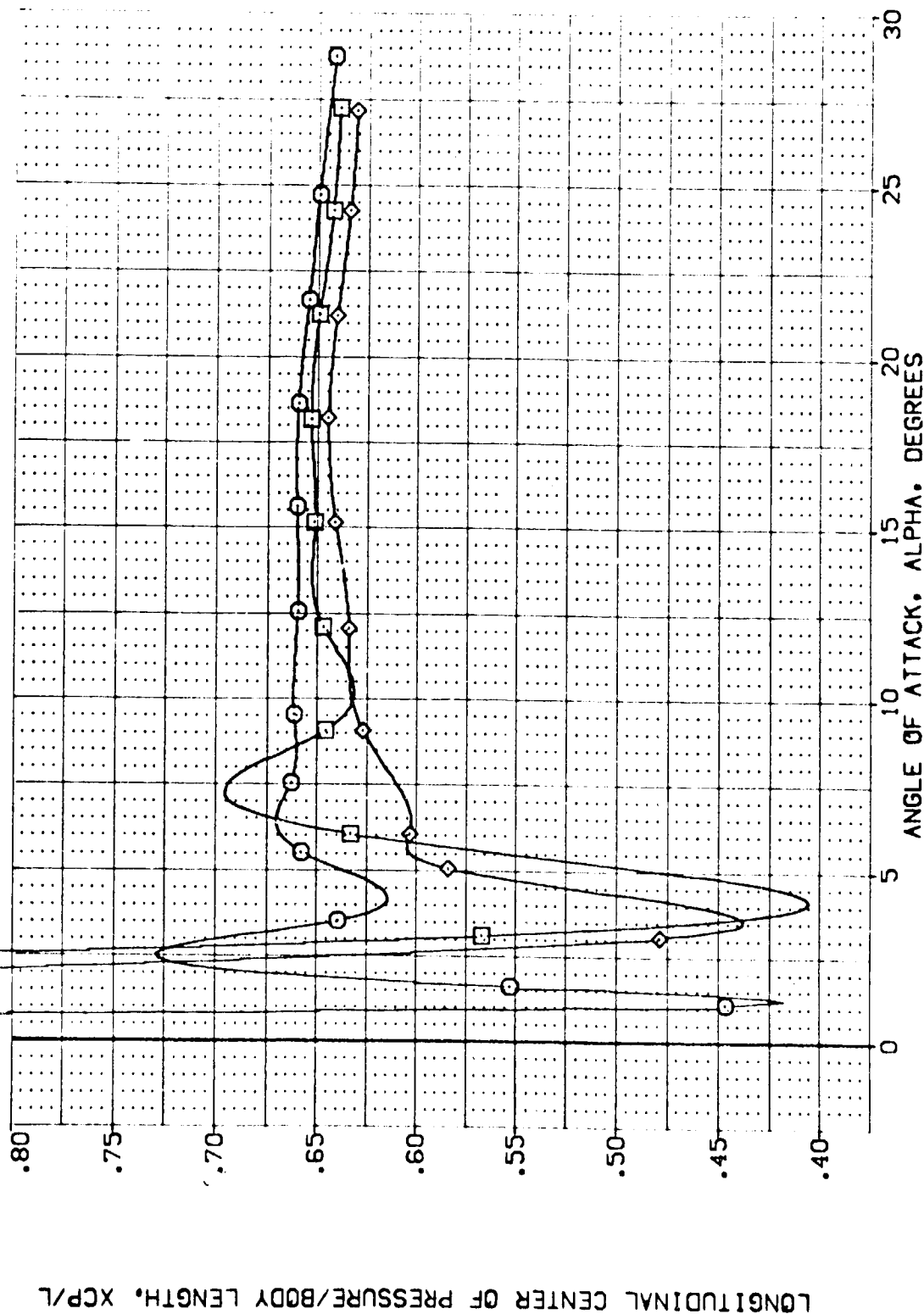


FIG. 9 SPEEDBRAKE EFFECTS

(C)MACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPOBRK	REFERENCE INFORMATION
[AEJ011]	ARC 11-747 OAS3A B C M F VI V NOM. RV/L	.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[AEJ024]	ARC 11-747 OAS3A B C M F VI V NOM. RV/L	.000	.000	-11.700	55.000	LREF 14.2440 IN.
[AEJ038]	ARC 11-747 OAS3A B C M F VI V NOM. RV/L	.000	.000	-11.700	85.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP .0000 IN.
						SCALE 11.2500 IN.
						SCALE .0300



DATA SET SYMBOL: (VE-024) (VE-036)

CONFIGURATION DESCRIPTION: ARC 11-747 OAS3A B C M F VI V NOM: RVL

ELF/VN: .000 .000

ATLRN: .000 .000

BDFLAP: -11.700 -11.700

D588: 55.000 65.000

REFERENCE INFORMATION:

SREF	2.4210	50. FT.
LREF	14.2440	IN.
BREF	28.1304	IN.
XMRP	32.3010	IN.
YMRP	.0000	IN.
ZMRP	11.2500	IN.
SCALE	.0300	SCALE

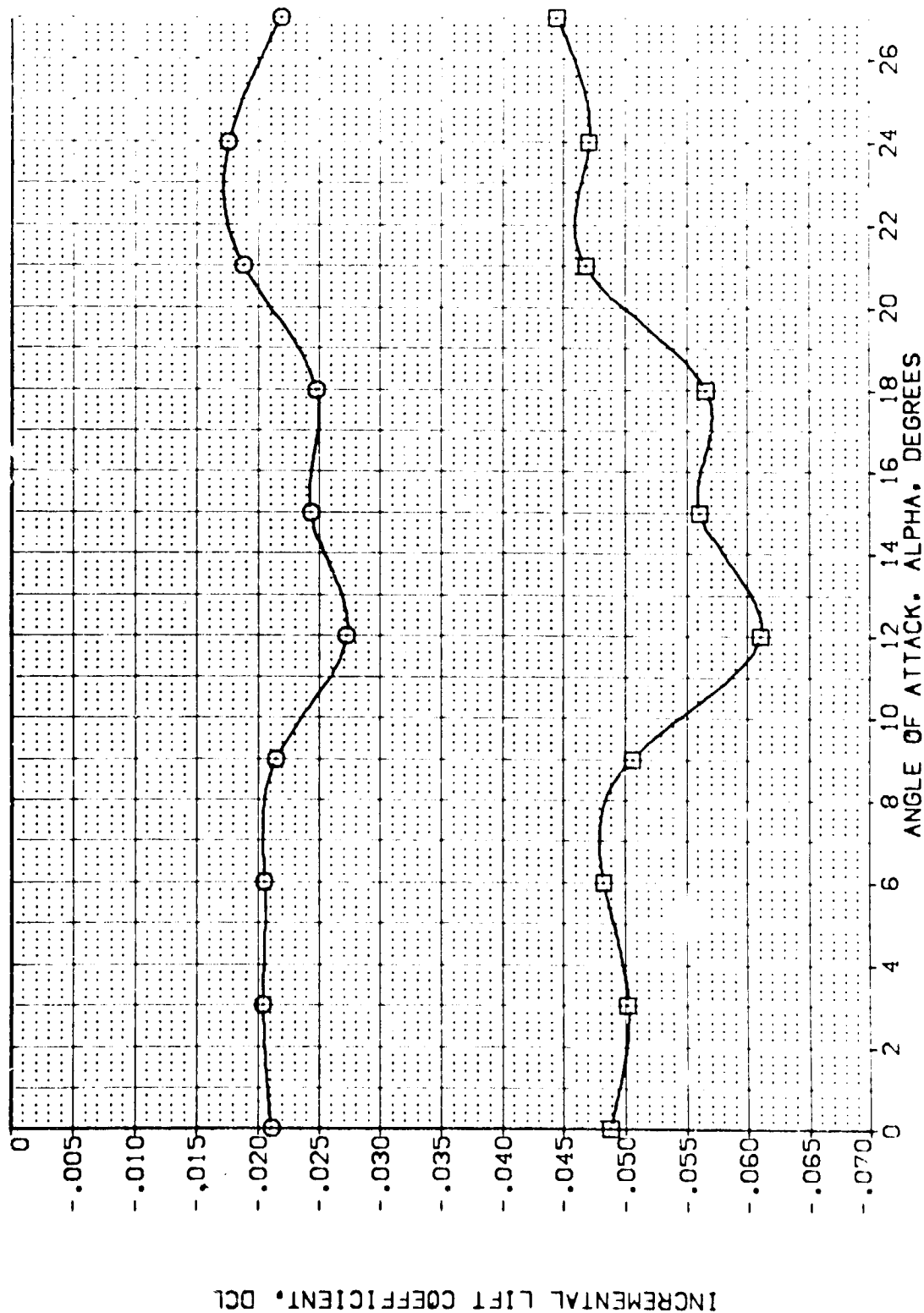


FIG. 9 SPEEDBRAKE EFFECTS

(A) MACH = .60



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	DSB	REFERENCE INFORMATION
(VEJ024)	ARC 11-747 OAS3A B C M F V1 V	.000	.000	-11.700	55.000	SREF 2.4210 50. FT.
(VEJ038)	ARC 11-747 OAS3A B C M F V1 V	.000	.000	-11.700	65.000	LREF 14.2440
						BREF 28.100%
						XMRP 32.3010
						YMRP .0000
						ZMRP .0000
						SCALE 11.2500
						SCALE .0300

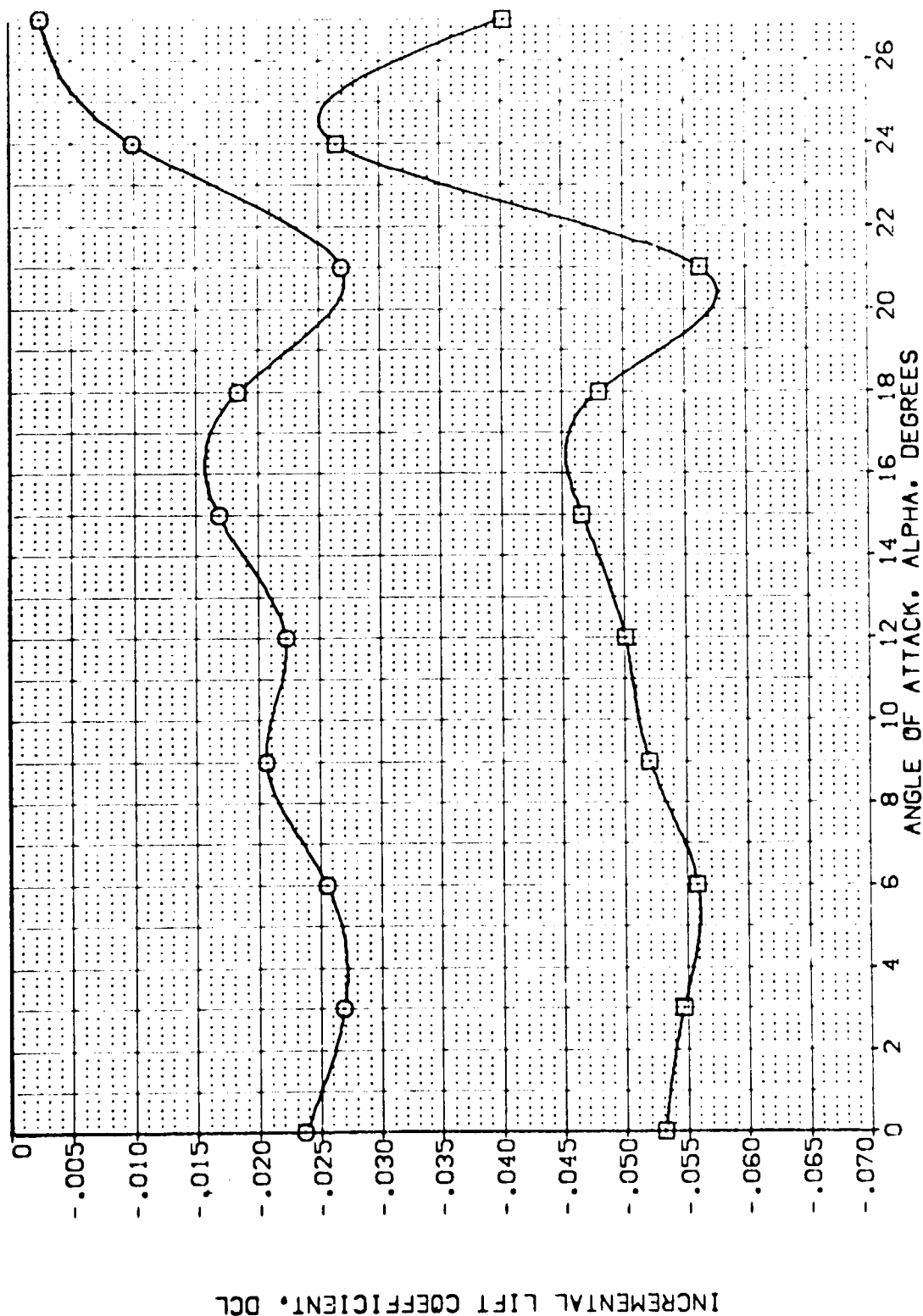


FIG. 9 SPEEDBRAKE EFFECTS

(B)MACH = .80

DATA SET SYMBOL	CONFIGURATION	DESCRIPTION
{VEJ024}	ARC 11-747	0A53A B C M F VI V
{VEJ038}	ARC 11-747	0A53A B C M F VI V

ELEVON	AIRLON	BDF LAP	DSB
.000	.000	-11,700	55,000
.000	.000	-11,700	85,000

REFERENCE INFORMATION	
SREF	2.4210 SQ.FT.
LREF	14.2440 IN.
BREF	28.1004 IN.
XMRP	32.5010 IN.
YMRP	0.0000 IN.
ZMRP	11.2500 IN.
SCALE	.0300 SCALE

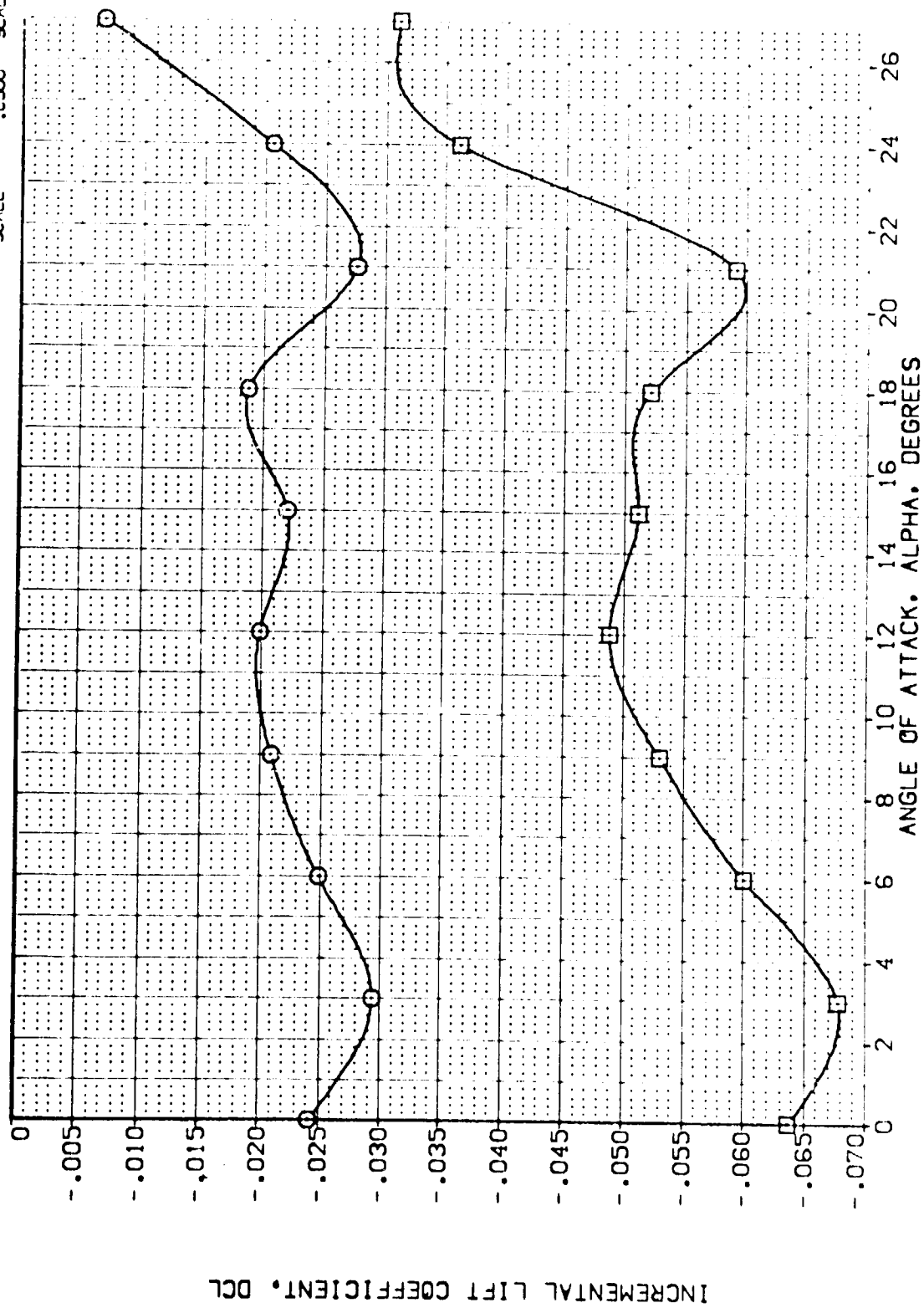


FIG. 9 SPEEDBRAKE EFFECTS

$$[C]_{MACH} = .90$$

DATA SET SYMBOL		CONFIGURATION DESCRIPTION		ELEVON		AILRON		BOFLAP		DSB		REFERENCE INFORMATION	
[VEJ024]	ARC 11-747	QAS3A	B C M F V	V	NOM	RV/L						SREF	2.4210
[VEJ036]	ARC 11-747	QAS3A	B C M F V	V	NOM	RV/L	.000	.000	-11.700	55.000		LREF	14.2440
							.000	.000	-11.700	85.000		BREF	28.1004
												XMRP	32.3010
												YMRP	.0000
												ZMRP	11.2500
												SCALE	.0300

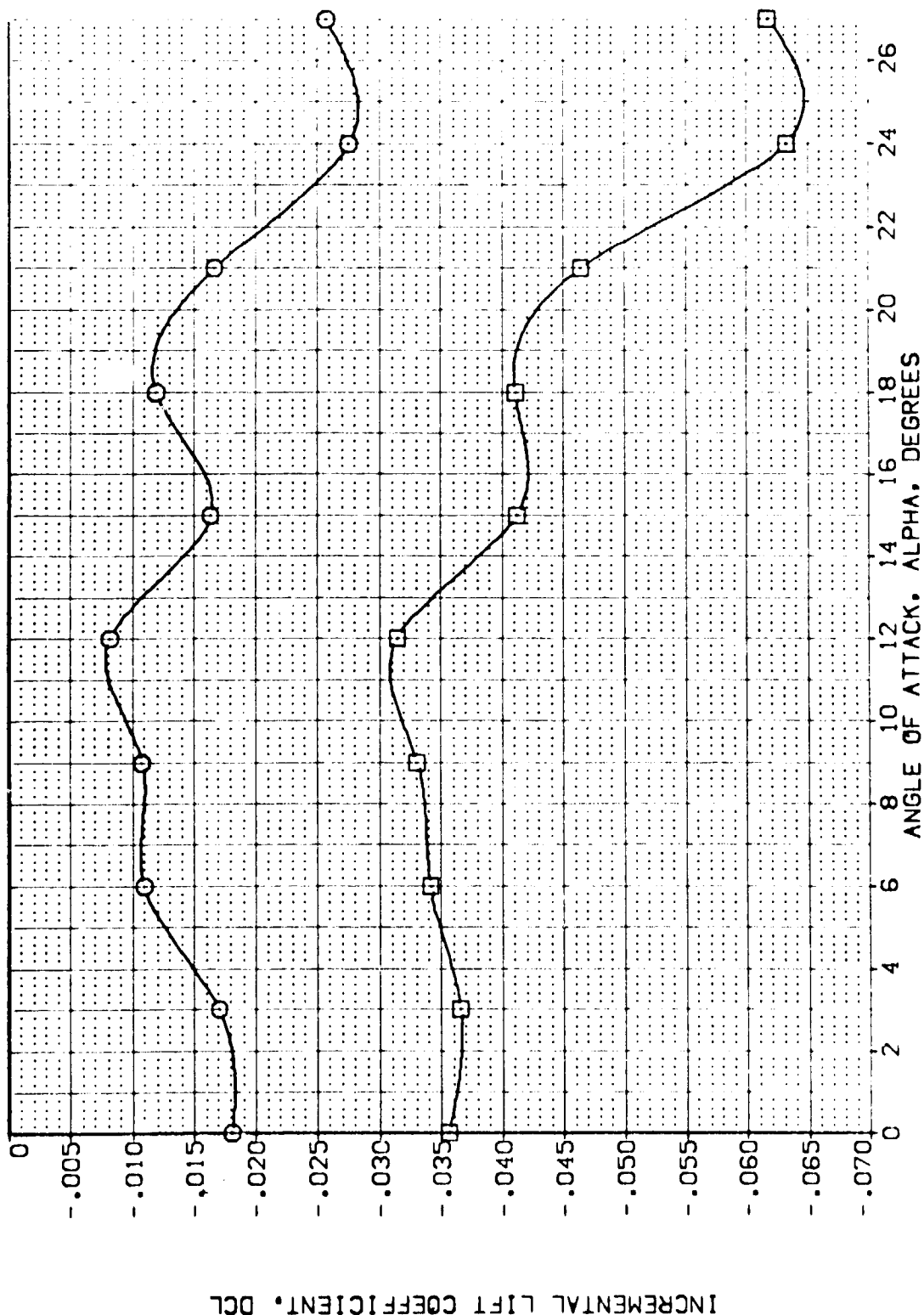


FIG. 9 SPEEDBRAKE EFFECTS

COMACH = 1.05



DATA SET SYMBOL		CONFIGURATION DESCRIPTION		ELEVON		AIRLON		BOFLAP		OSB		REFERENCE INFORMATION	
(VEJ024)	□	ARC 11-747	CA53A B C H F V I V	NON. RV/L	.000	.000	.000	-11.700	55.000	SREF	2.4210	50.000	50.000
(VEJ038)	□	ARC 11-747	CA53A B C H F V I V	NON. RV/L	.000	.000	.000	-11.700	85.000	LREF	14.2440	11.000	11.000
										BREF	28.1004	11.000	11.000
										XMRP	32.3010	11.000	11.000
										ZMRP	11.2500	11.000	11.000
										SCALE	0.000	11.000	11.000

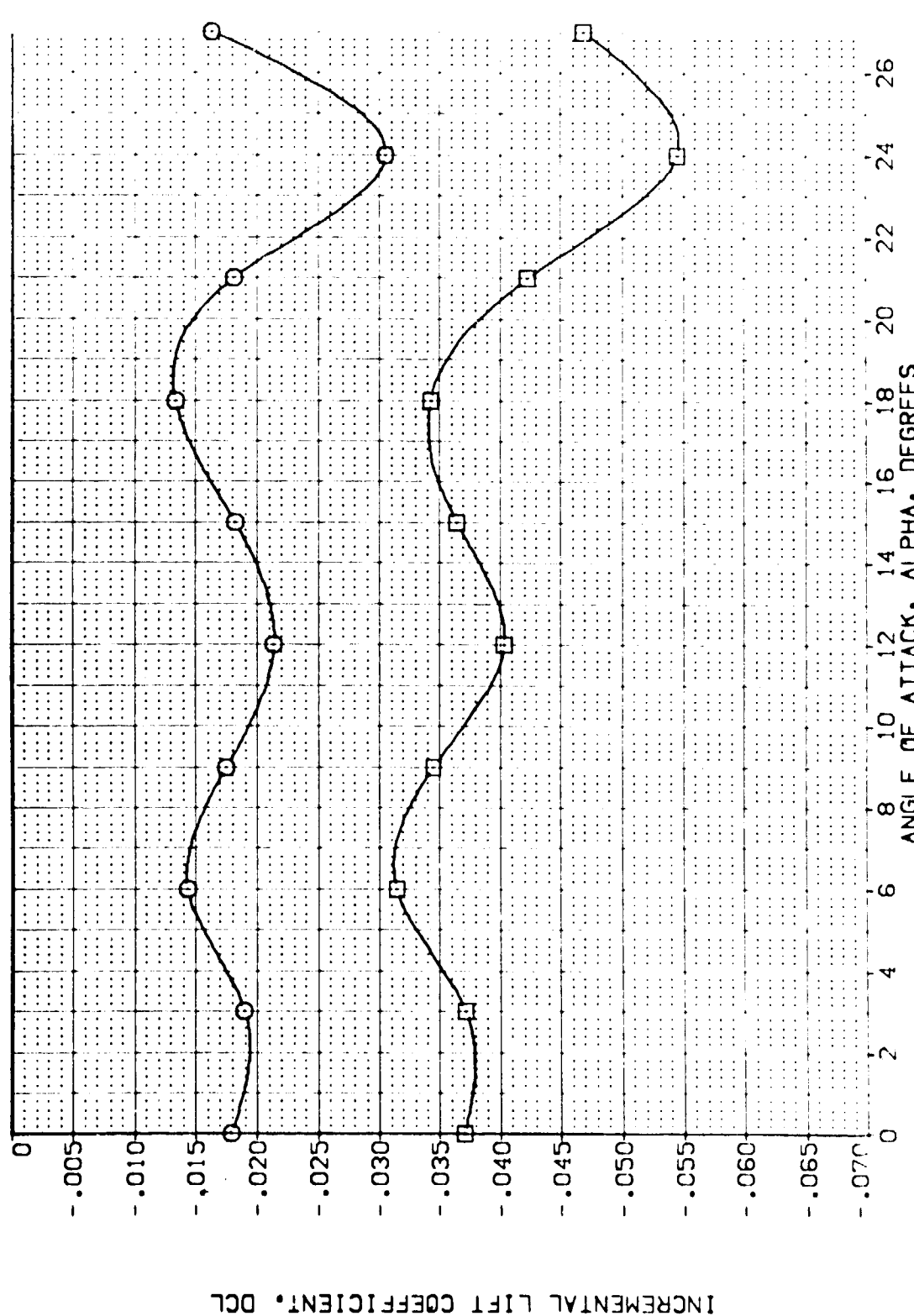


FIG. 9 SPEEDBRAKE EFFECTS  
(E)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	DSB	REFERENCE INFORMATION
[VEJ024]	ARC 11-747 OAS3A B C M F VI V	.000	.000	-11.700	55.000	SREF 2.4210 SQ.FT.
[VEJ038]	ARC 11-747 OAS3A B C M F VI V	.000	.000	-11.700	85.000	LREF 14.2440 IN.
						BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

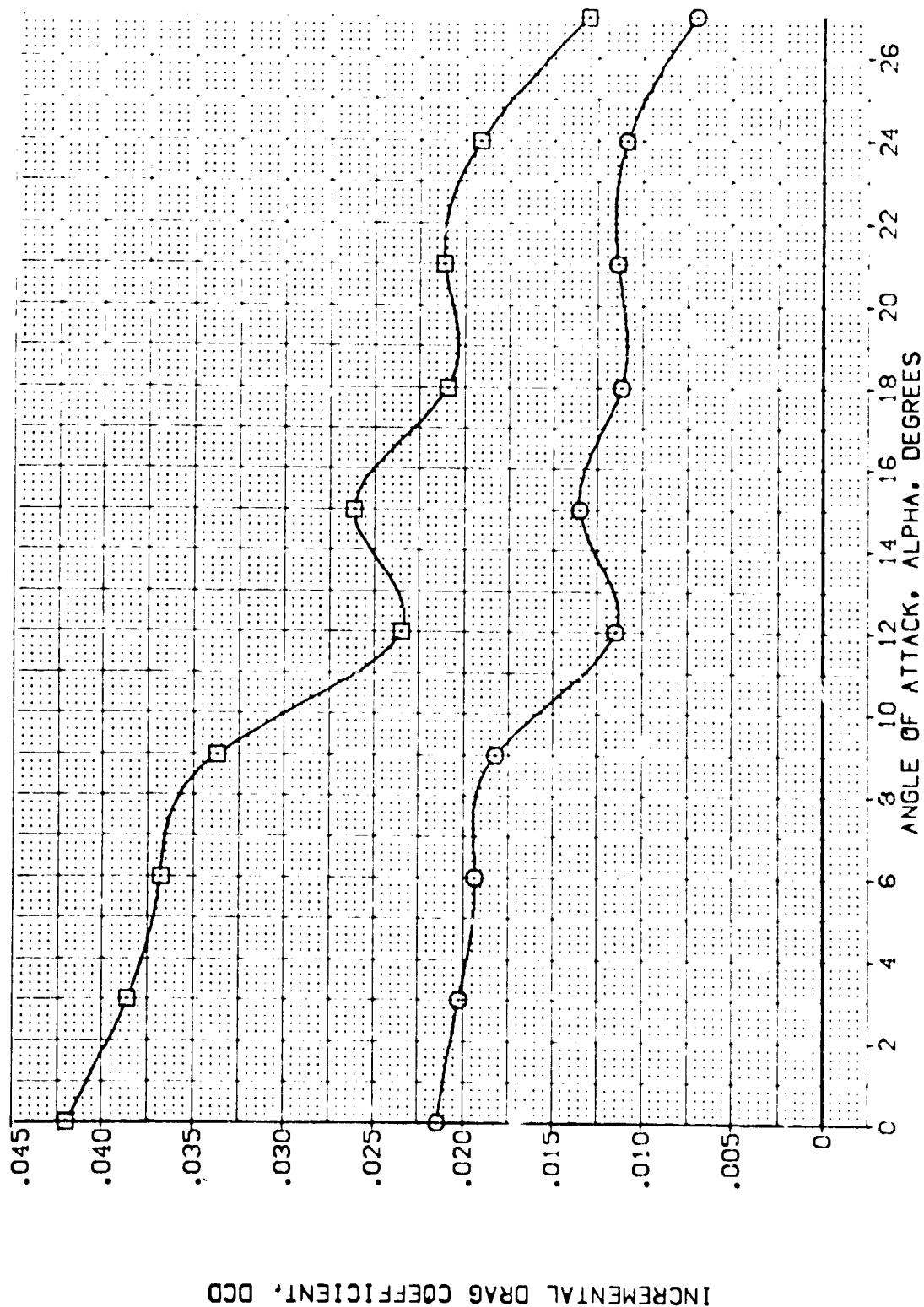


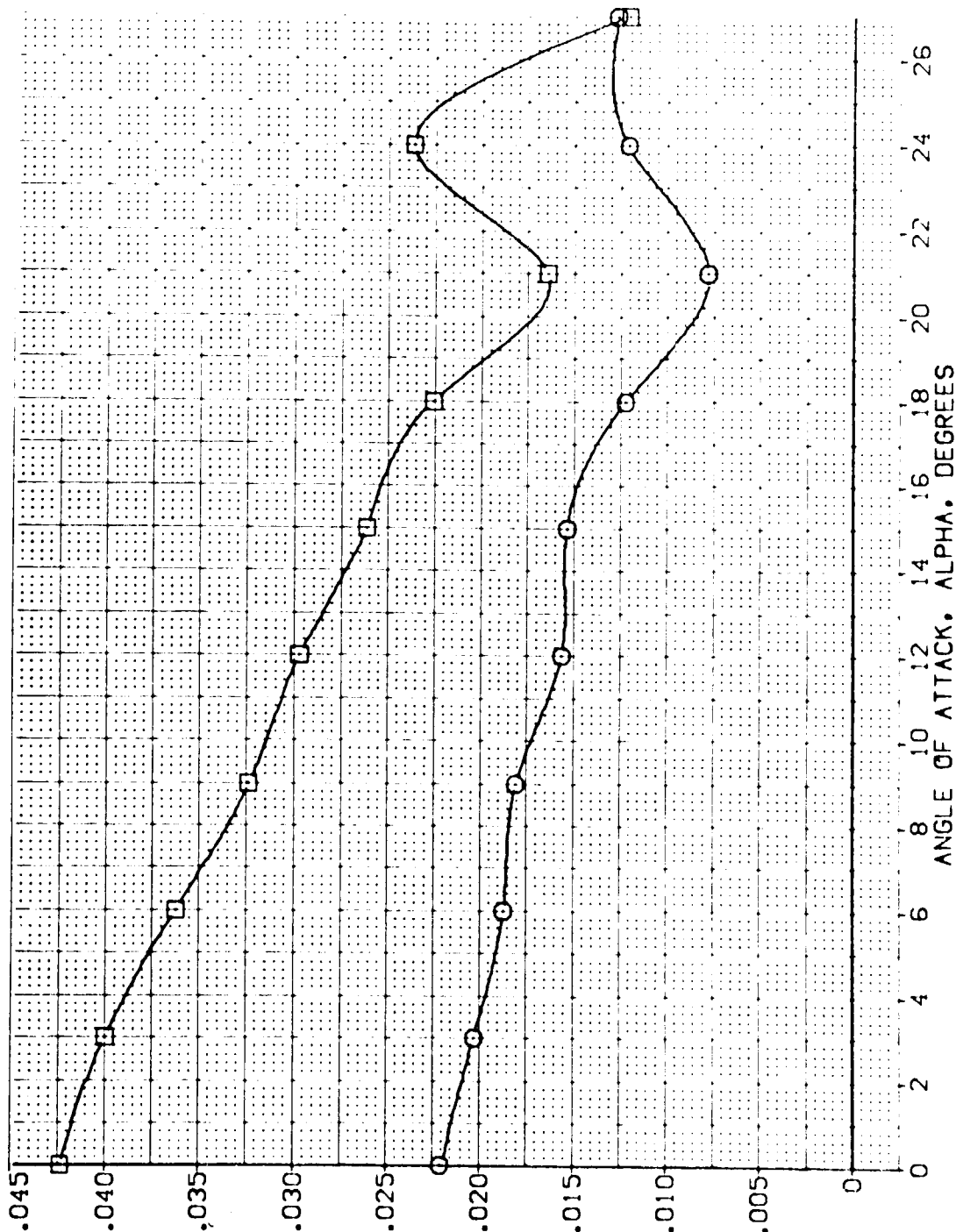
FIG. 9 SPEEDBRAKE EFFECTS

(A)MACH = .60

DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 (VEJ024) [ ] ARC 11-747 0A53A B C H F V I V NOM. RV/L  
 (VEJ038) [ ] ARC 11-747 0A53A B C H F V I V NOM. RV/L

ELEVON AIRLON BDF LAP DSB  
 .000 .000 -11.700 55.000  
 .000 .000 -11.700 65.000

REFERENCE INFORMATION  
 SREF 2.4210 SQ.FT.  
 LREF 14.2440 IN.  
 BREF 28.1004 IN.  
 XMRP 32.3010 IN.  
 YMRP 11.0000 IN.  
 ZMRP 11.2500 IN.  
 SCALE .0300



INCREMENTAL DRAG COEFFICIENT, DCO

FIG. 9 SPEEDBRAKE EFFECTS

(B)MACH = .80



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOX LAP	DSB	REFERENCE INFORMATION	
(VEJ024)	ARC 11-747 QAS3A B C H F V	.000	.000	-11.700	55.000	SREF	2.4210 SQ. FT.
(VEJ038)	ARC 11-747 QAS3A B C H F V	.000	.000	-11.700	65.000	LREF	14.2440
						BREF	28.1004
						XMRP	32.3010
						YMRP	.0000
						ZMRP	.0000
						SCALE	11.2500 IN.
							.0300 IN.

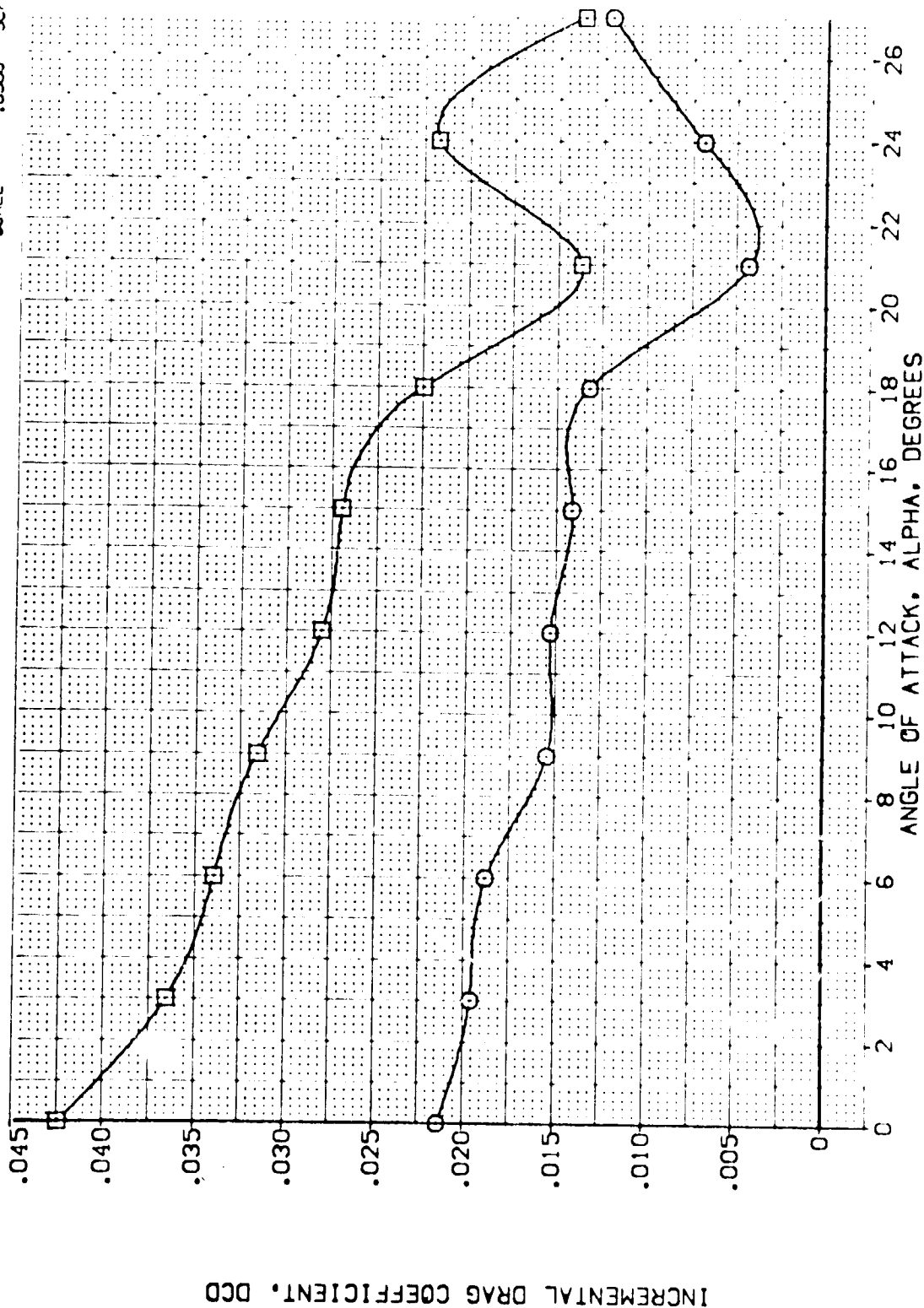


FIG. 9 SPEEDBRAKE EFFECTS

(C)MACH = .90



DATA SET SYMBOL		CONFIGURATION DESCRIPTION		ELEVATION		AIRFLOW		BOE LAP		DDB		REFERENCE INFORMATION	
{VEJ024}	ARC 11-747	BA53A	B C H F V I V	NOM. RV/L	.000	.000	-11.700	-11.700	55.000	SREF	2.4210	SQ. FT.	
{VEJ038}	ARC 11-747	BA53A	B C H F V I V	NOM. RV/L	.000	.000	-11.700	-11.700	86.000	LREF	14.2440		
										BREF	28.1004		
										XMRP	32.3010		
										YMRP	.0000		
										ZMRP	11.2500		
										SCALE	.0300	SCALE	

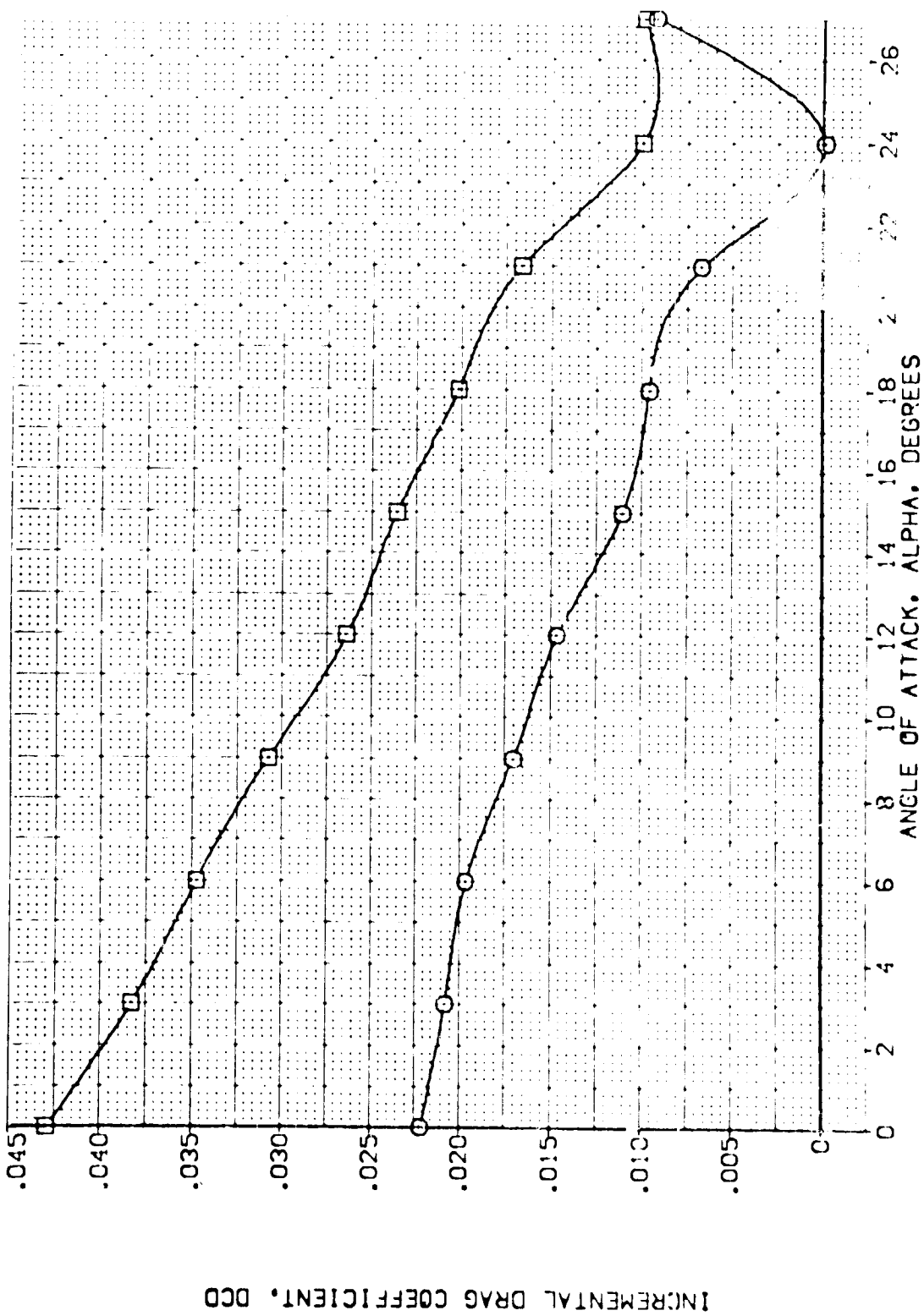


FIG. 9 SPEEDBRAKE EFFECTS  
(E)MAC = .20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	DSB	REFERENCE INFORMATION
(VEJ024)	ARC 11-747 OAS3A B C H F V1 V	.000	.000	-11.700	55.000	SREF 2.4210 SQ.FT.
(VEJ038)	ARC 11-747 OAS3A B C H F V1 V	.000	.000	-11.700	65.000	LREF 14.2440 IN.
						BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP .0000 IN.
						SCALE 11.2500
						SCALE .0300

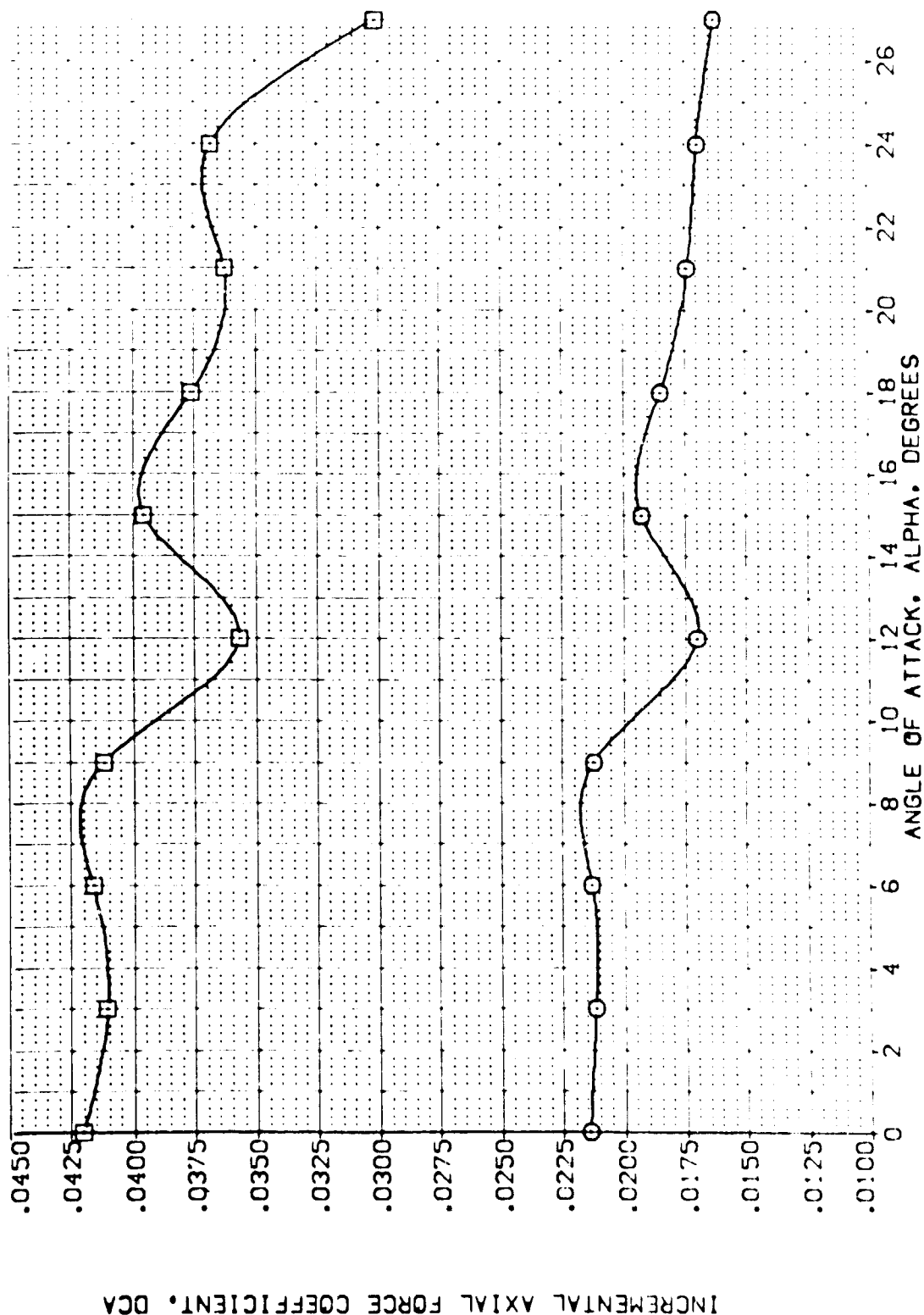


FIG. 9 SPEEDBRAKE EFFECTS

(A) VAC = .60



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	DSB	REFERENCE INFORMATION
(VEJ024)	ARC 11-747 DASSA B C H F VI V	.000	.000	-11.700	55.000	SREF 2.4210 SQ.FT.
(VEJ038)	ARC 11-747 DASSA B C H F VI V	.000	.000	-11.700	85.000	LREF 14.2440 IN.
						BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

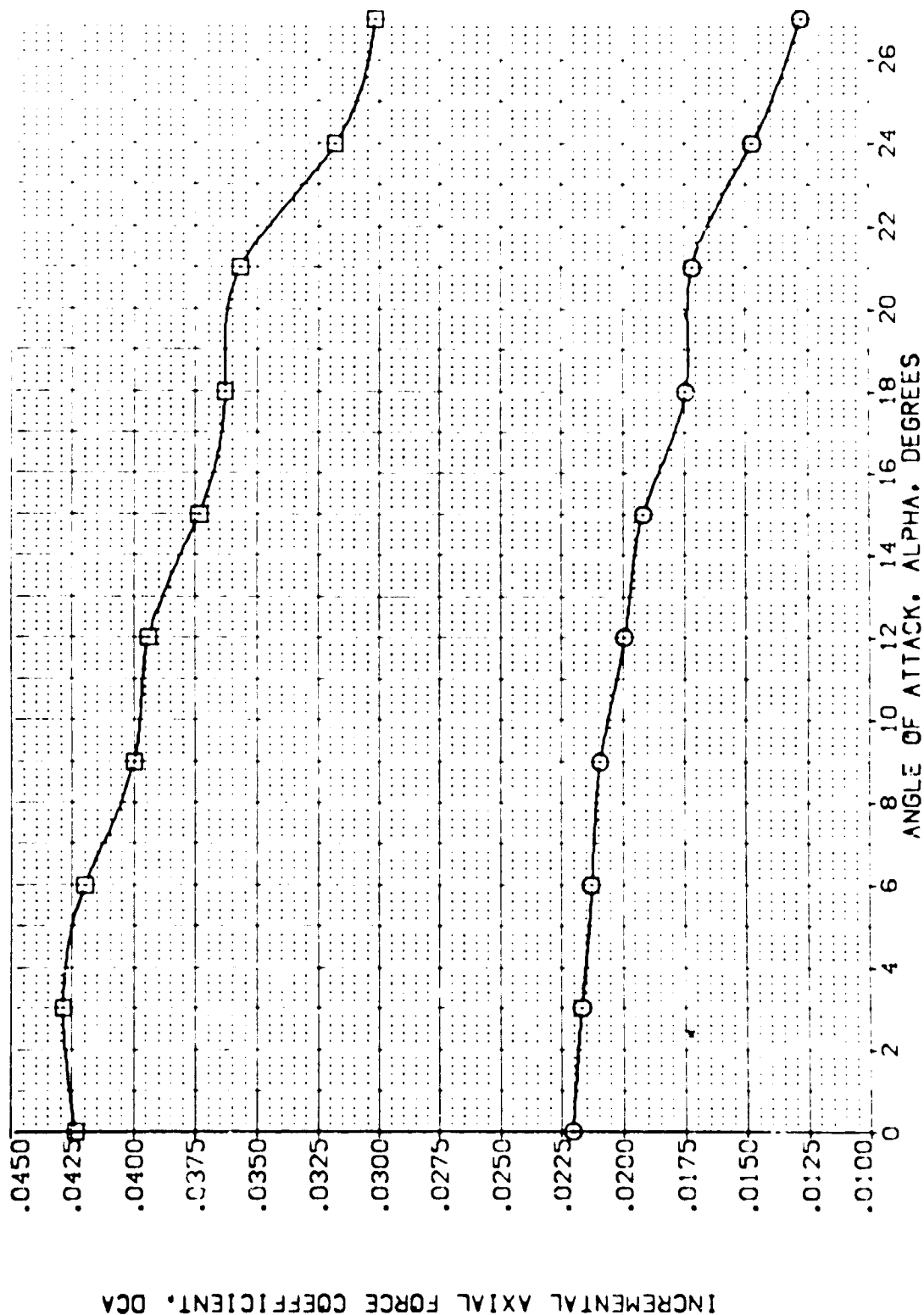


FIG. 9 SPEEDBRAKE EFFECTS

(8)  $MACH = .80$





DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVATION	AIRLIFT	BOFLAP	DSB	REFERENCE INFORMATION
(VEJ024)	ARC 11-747 CAS3A B C H F VI V	.000	.000	-11.700	55.000	SREF 2.4210 SQ.FT.
(VEJ038)	ARC 11-747 CAS3A B C H F VI V	.000	.000	-11.700	65.000	LREF 14.2440
						BREF 28.1004
						XMRP 32.3010
						YMRP .0000
						ZMRP .0000
						SCALE 11.2500
						SCALE .0300

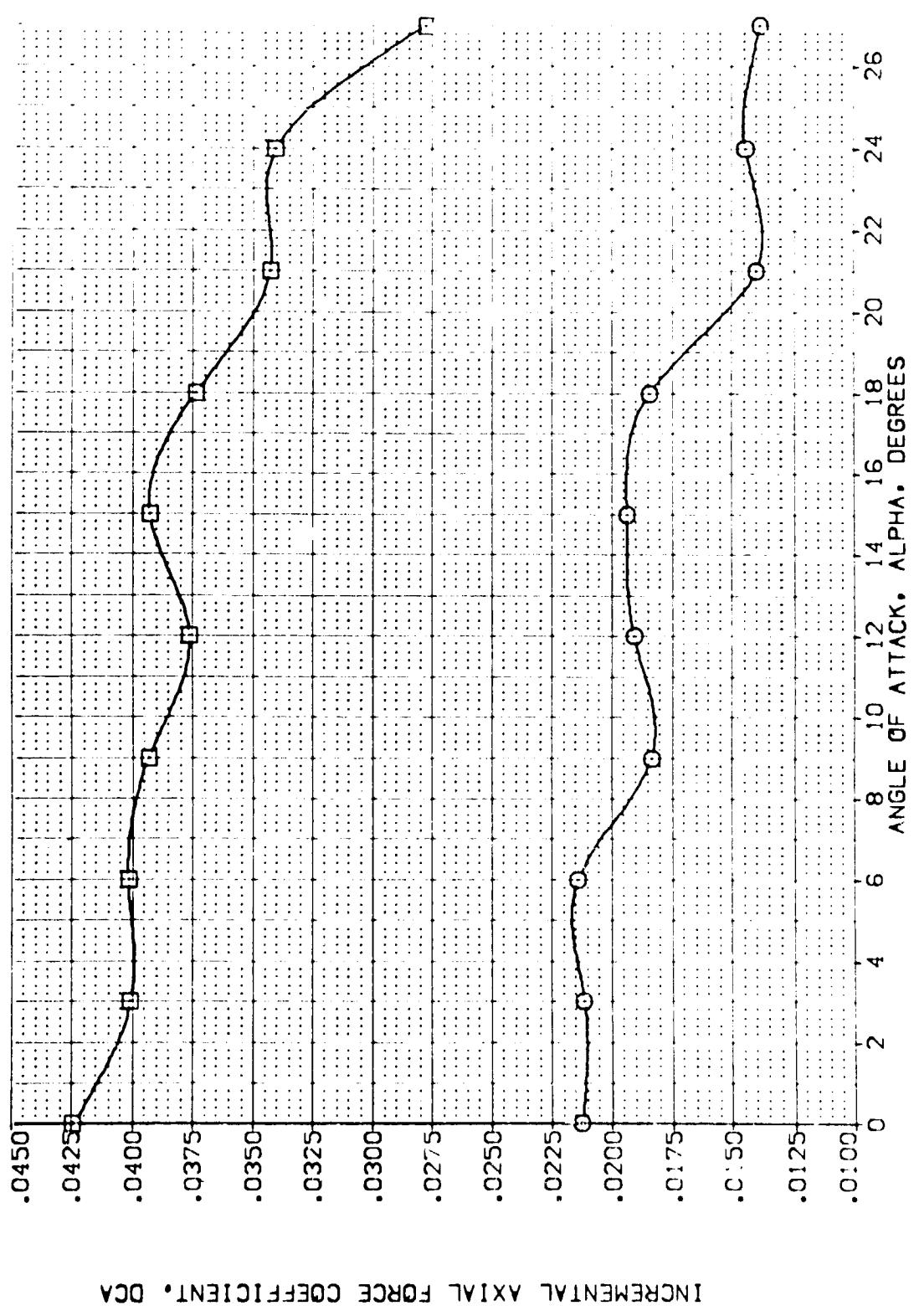


FIG. 9 SPEEDBRAKE EFFECTS

(CJ)MACH = .90

DATA SET SYMBOL		CONFIGURATION DESCRIPTION		ELEVON		AILRON		BOFLAP		DSB		REFERENCE INFORMATION	
[VEJ074]	ARC 11-747	BAS3A	B C H F VI V	.000	.000	.000	-11.700	55.000	SREF	2.4210	50.1 FT.		
[VEJ038]	ARC 11-747	BAS3A	B C H F VI V	.000	.000	.000	-11.700	85.000	LREF	14.2440			
									BREF	28.1004			
									XMRP	32.3010			
									YMRP	.0000			
									ZMRP	11.2500			
									SCALE	.0300			

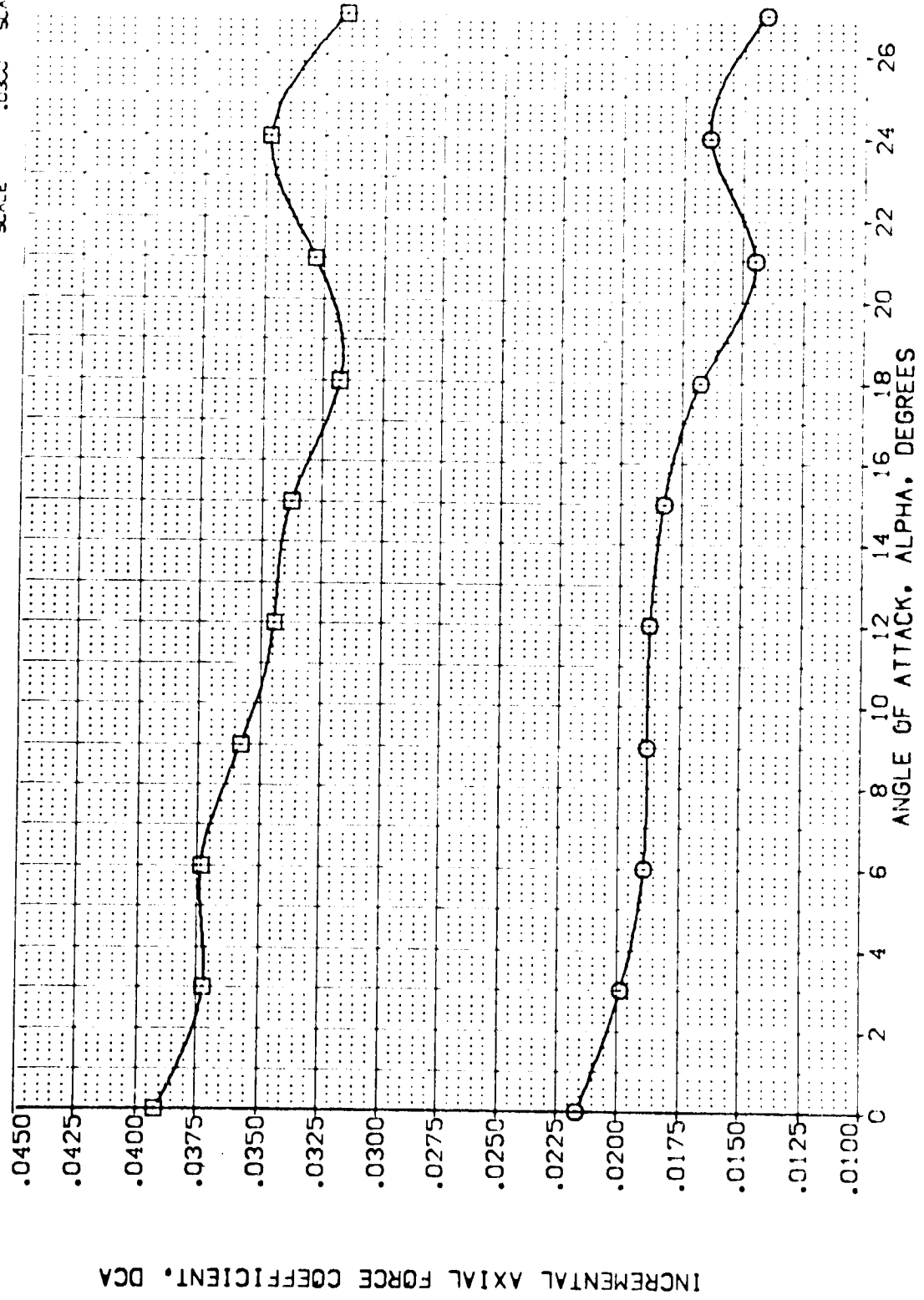


FIG. 9 SPEEDBRAKE EFFECTS

(M)MACH = 1.05

DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 (VEJ024) Q ARC 11-747 DASSA B C M F V V M21: RVUL  
 (VEJ038) Q ARC 11-747 DASSA B C M F V V M21: RVUL

ELEVON AIRRON BOFLAY DSB  
 .000 .000 -11.700 55.000  
 .000 .000 -11.700 85.000

REFERENCE INFORMATION:  
 SREF 2.4210 SQ.FT.  
 REF 14.2440  
 SREF 28.1074  
 REF 32.3010  
 Y400 .0000  
 Z400 .0000  
 SCALE 11.2500 SCALE

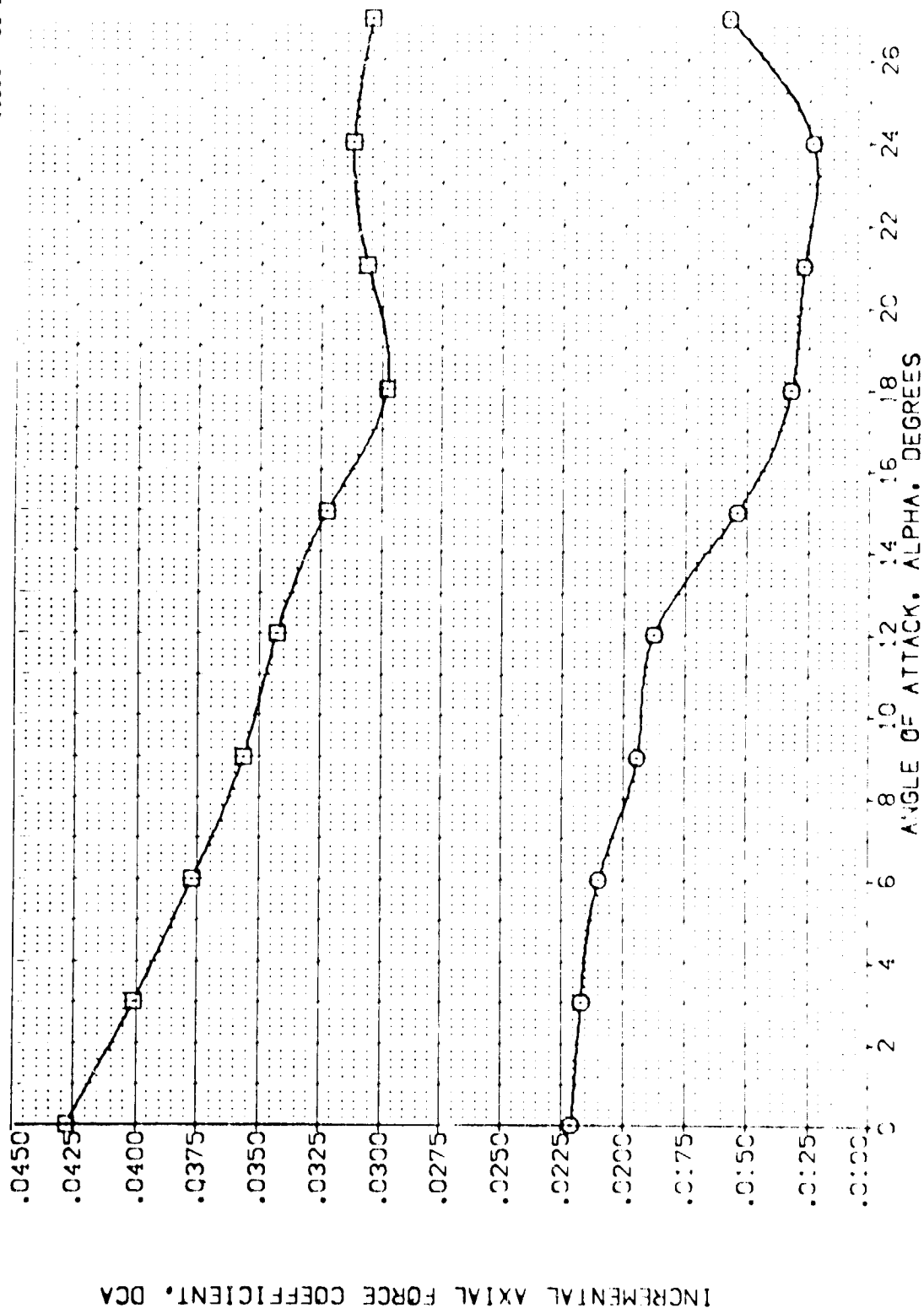


FIG. 9 SPEEDBRAKE EFFECTS

(E)MAC = 1.20

DATA SET SYMBOL: [VEJ024] [VEJ038]

CONFIGURATION DESCRIPTION:  
 ARC 11-747 BAS3A B C M F V1 V NOM: RV/L  
 ARC 11-747 BAS3A B C M F V1 V NOM: RV/L

ELEVON: .000 .000 .000

AILERON: .000 .000 .000

BD/LAP: -11.700 -11.700

DSB: 55.000 85.000

REFERENCE INFORMATION:  
 SREF: 2.4210 50.000  
 LREF: 14.2440  
 BREF: 28.1000  
 YMRP: 32.3010  
 YMRP: .0000  
 ZMRP: 11.2500  
 SCALE: .0300

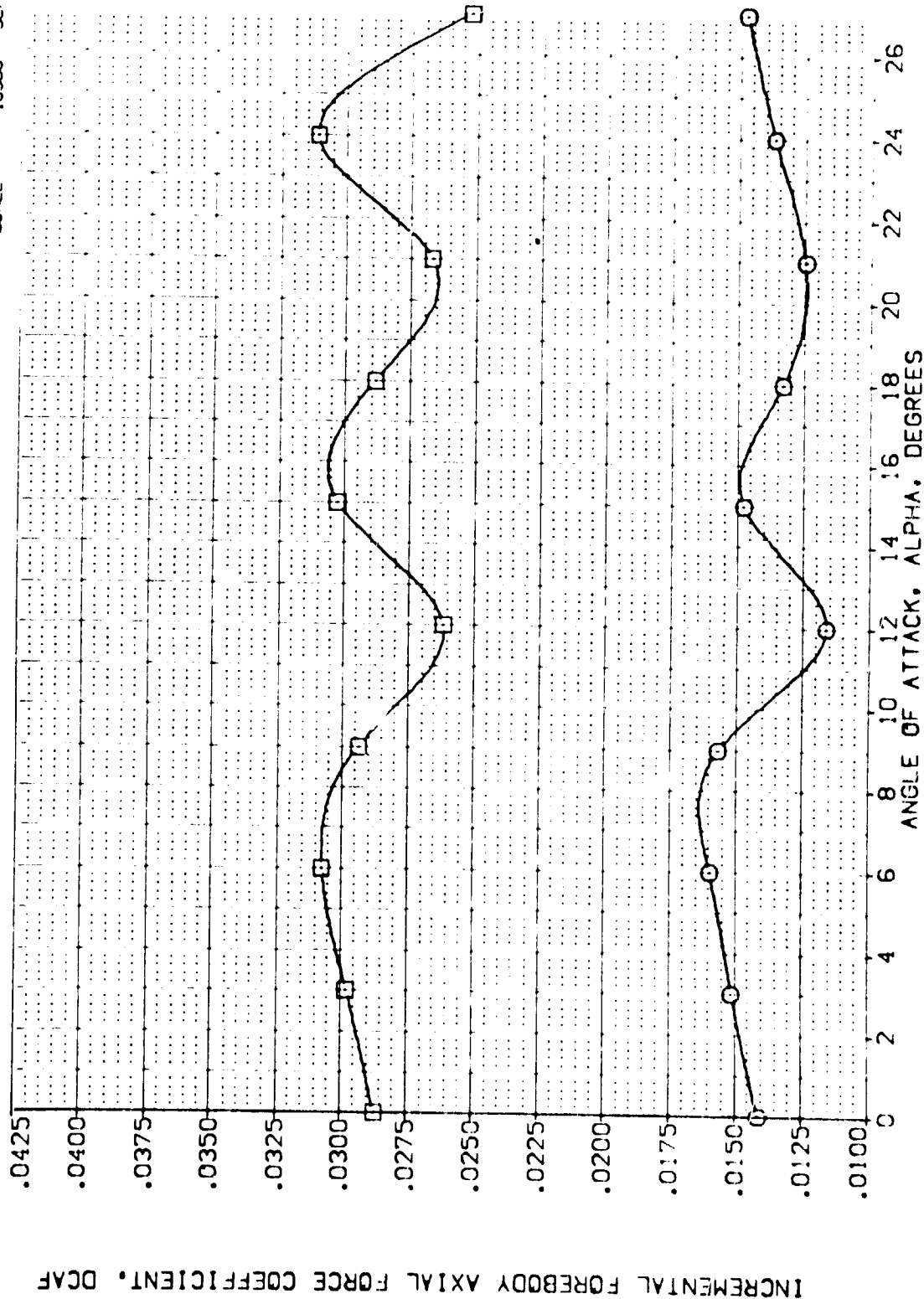


FIG. 9 SPEEDBRAKE EFFECTS

(A) MACH = .60

DATA SET SYMBOL: 9  
 (VEJ024)  
 (VEJ038)

CONFIGURATION DESCRIPTION  
 ARC 11-747 OAS3A B C M F VI V  
 ARC 11-747 OAS3A B C M F VI V

ELEVON: .000  
 AILRON: .000  
 BOFLAP: -11.700  
 OSB: 55.000  
 85.000

REFERENCE INFORMATION  
 SREF: 2.4210 SQ.FT.  
 LREF: 14.2440  
 BREF: 28.1004  
 XMRP: 32.3010  
 YMRP: .0000  
 ZMRP: 11.2500  
 SCALE: .0300

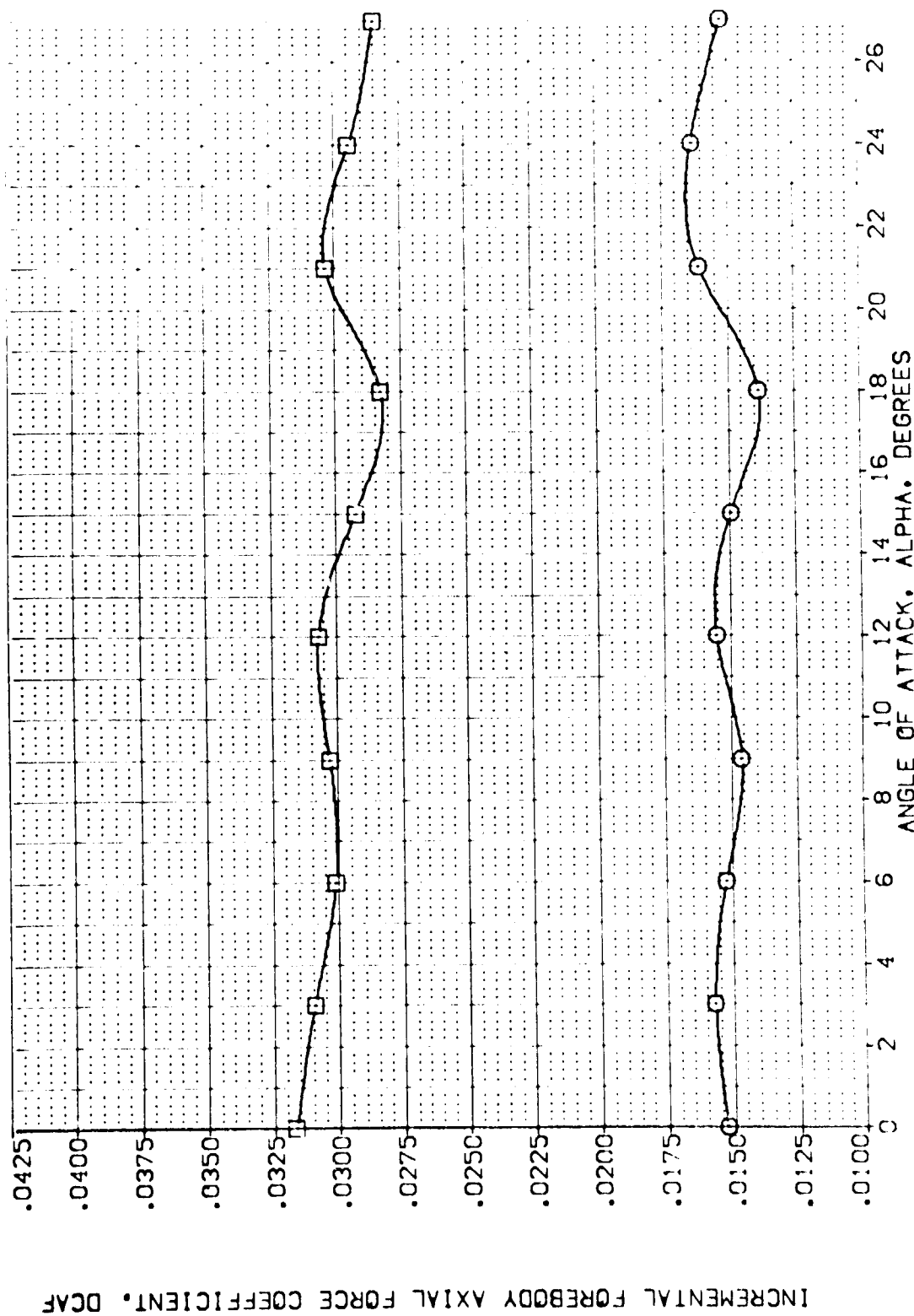
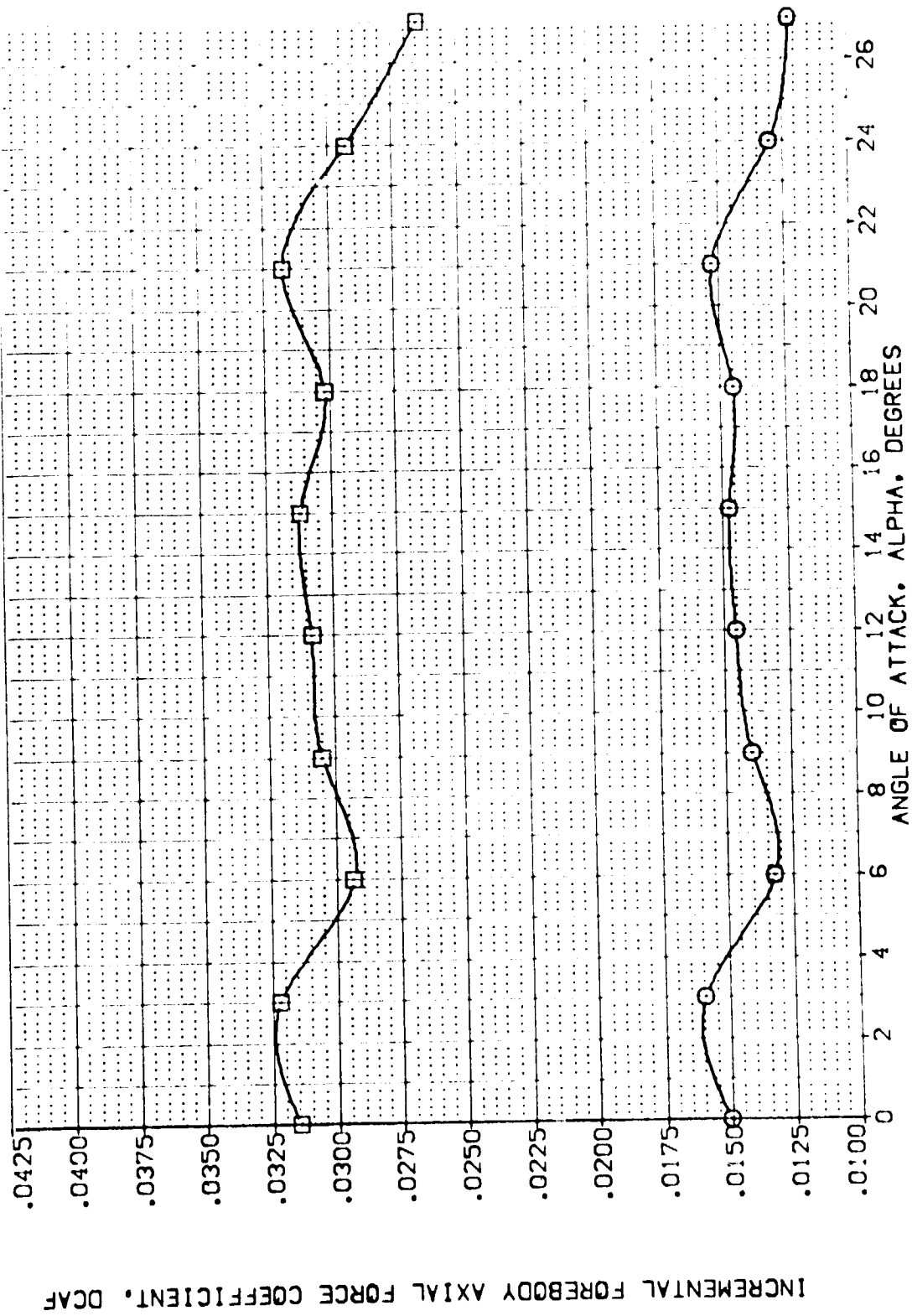


FIG. 9 SPEEDBRAKE EFFECTS

(B)MACH = .80



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	DSB	REFERENCE INFORMATION
(VEJ024)	ARC 11-747 BA53A B C M F V1 V	.000	.000	-11.700	55.000	SREF 2.4210 SQ.FT.
(VEJ038)	ARC 11-747 BA53A B C M F V1 V	.000	.000	-11.700	85.000	LREF 14.2440 IN.
						BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300



INCREMENTAL FOREBODY AXIAL FORCE COEFFICIENT, DCAF

FIG. 9 SPEEDBRAKE EFFECTS

(C)MACH = .90



DATA SET SYMBOL: (VEJ024) (VEJ038) CONFIGURATION DESCRIPTION: ARC 11-747 QAS3A B C M F VI V NON: RVUL V NON: RVUL ELEVATION: .000 .000 AIRLON: .000 .000 BOFLAP: -11.700 -11.700 DSB: 55.000 85.000 REFERENCE INFORMATION: SREF: 2.4210 SQ.FT. LREF: 14.244C BREF: 28.100A AREF: 32.301C YREF: .000 ZREF: 11.2500 SCALE: .0300

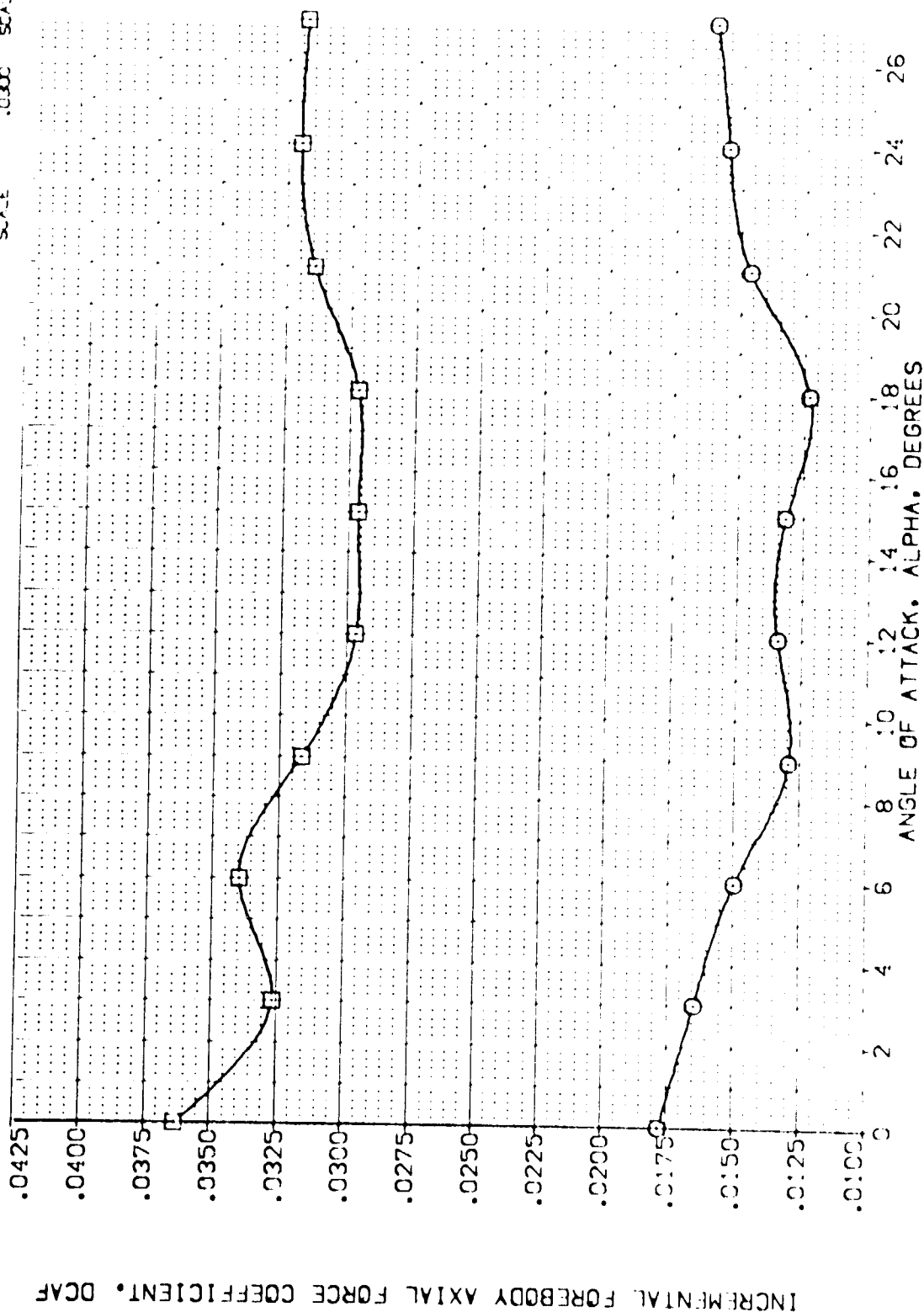


FIG. 9 SPEEDBRAKE EFFECTS

(O)  $M_{\infty} = 1.05$

DATA SET SYMBOL: [VEJ024] [VEJ036] CONFIGURATION DESCRIPTION: ARC 11-747 DA53A B C M F VI V NOM: RV/L 12C 11-747 DA53A B C M F VI V NOM: RV/L

ELEVON	AILERON	BOFLAP	DSB	REFERENCE INFORMATION
.000	.000	-11.700	55.000	SREF 2.4210 50. FT.
.000	.000	-11.700	85.000	LREF 14.2440
				BREF 28.0004
				XMRP 32.3010
				YMRP .0000
				ZMRP 11.2500
				SCALE .0300

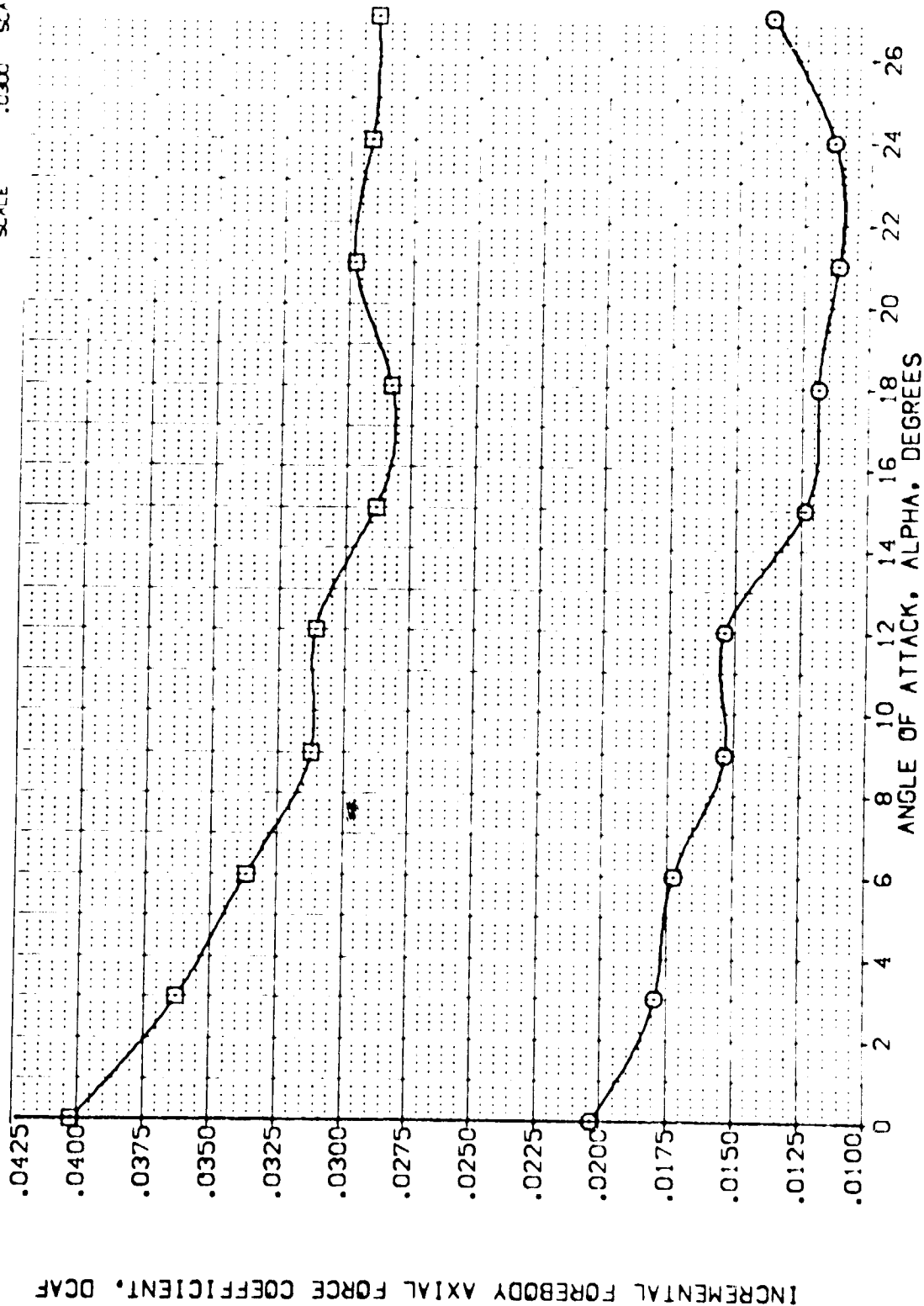


FIG. 9 SPEEDBRAKE EFFECTS

(M)MACH = 1.20



DATA SET SYMBOL: [VEJ024] [VEJ038]

CONFIGURATION DESCRIPTION: ARC 11-747 DA53A B C M F VI V NOM: RVUL  
 ARC 11-747 DA53A B C M F VI V NOM: RVUL

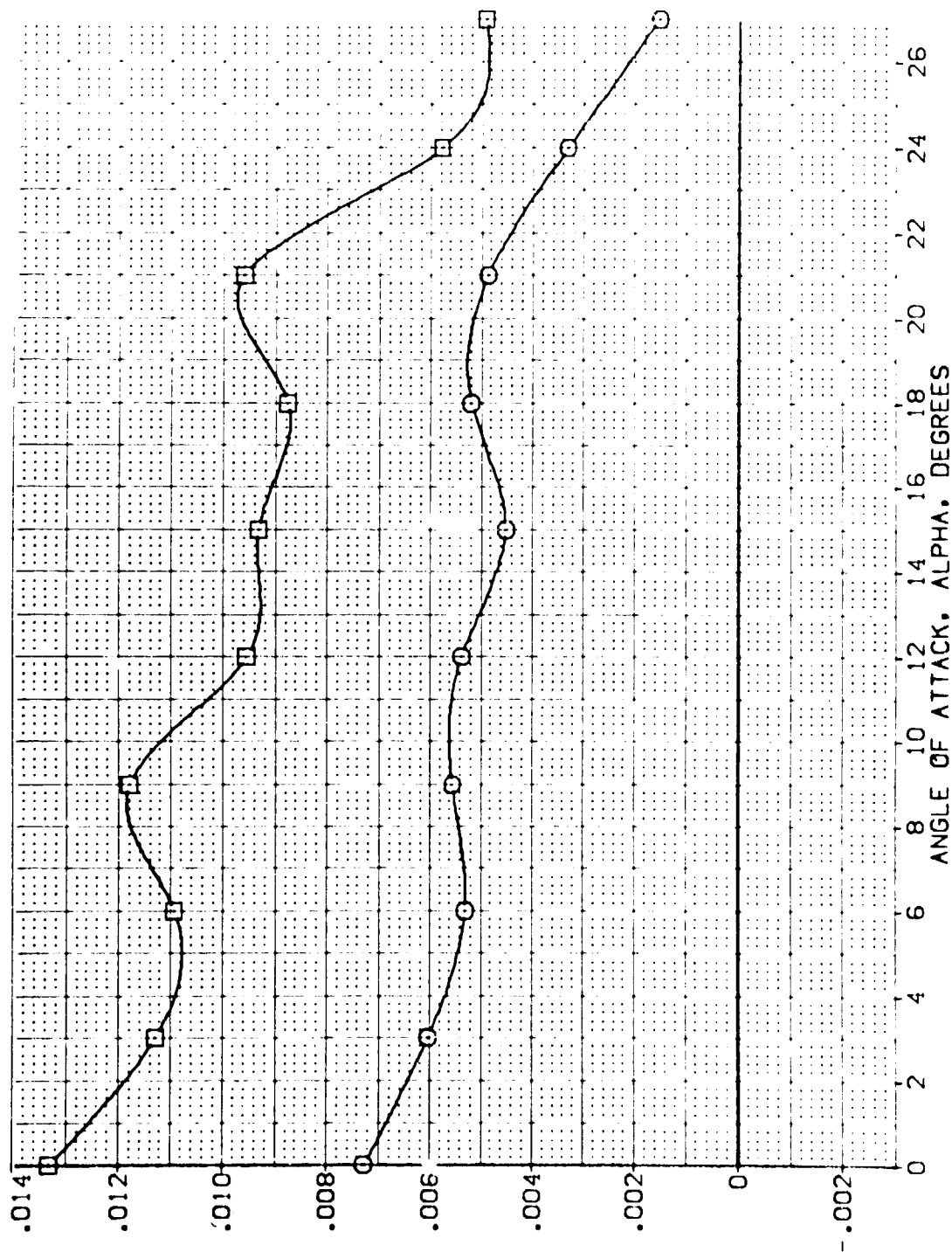
ELEVON: .000 .000

AILERON: .000 .000

BOFLAP: -11.700 -11.700

DSB: 55.000 65.000

REFERENCE INFORMATION: SREF 2.4210 50. FT.  
 LREF 14.2440 IN.  
 BREF 28.1004 IN.  
 XMRP 32.3010 IN.  
 YMRP .0000 IN.  
 ZMRP 11.2500 IN.  
 SCALE .0300



INCREMENTAL BASE AXIAL FORCE COEFFICIENT, DCAB

FIG. 9 SPEEDBRAKE EFFECTS

(A)MACH = .60



DATA SET SYMBOL: [VEJ024] [VEJ038] CONFIGURATION DESCRIPTION: ARC 11-747 DAS3A B C M F VI V NOT: RV/L NOT: RV/L

ELEVON	AILERON	BOFLAP	DSB
.000	.000	-11.700	55.000
.000	.000	-11.700	85.000

REFERENCE INFORMATION:

SREF	LREF	BREF	YMRP	ZMRP	SCALE
2.4210	14.2440	28.1004	32.3010	11.2500	.0300

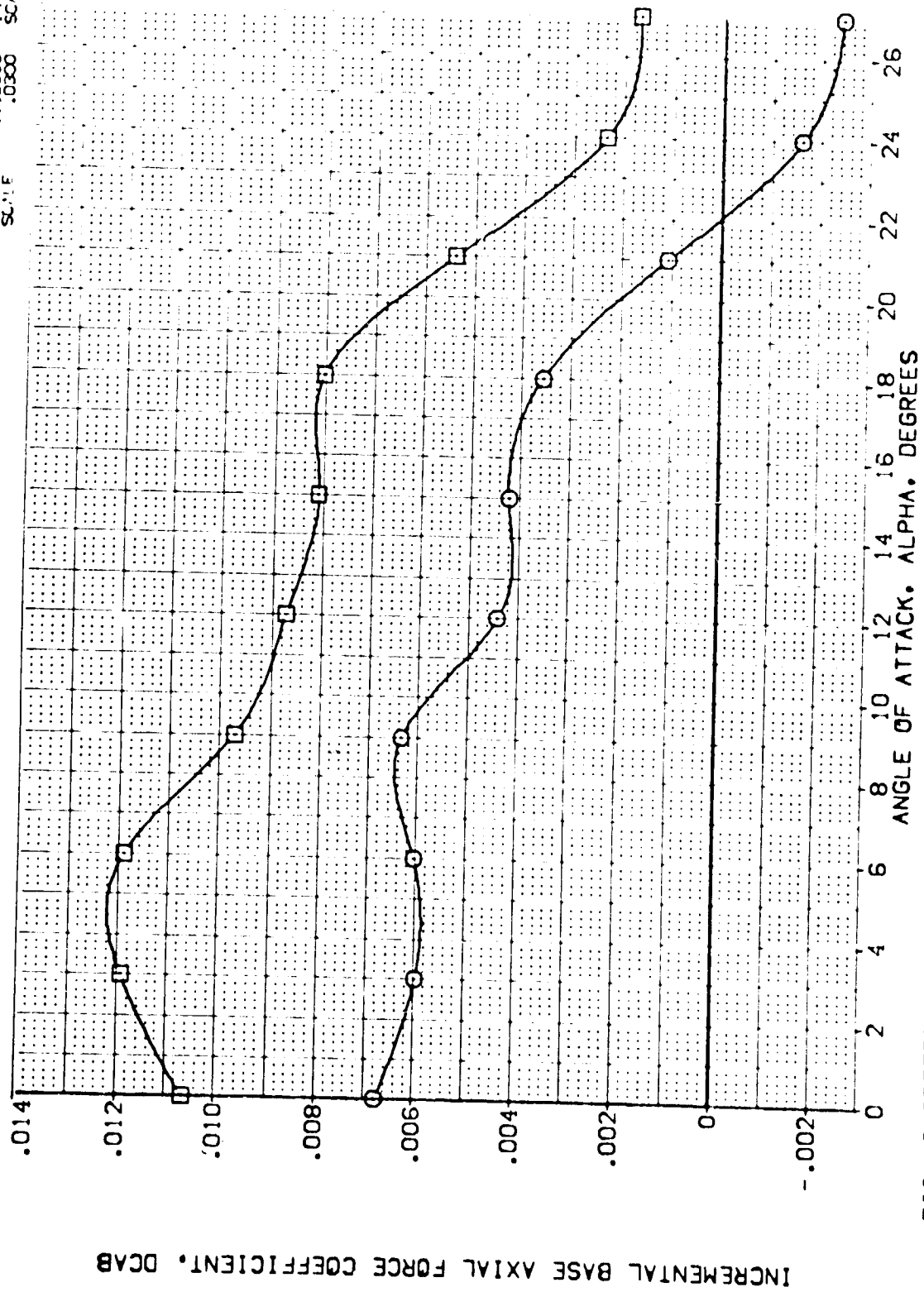


FIG. 9 SPEEDBRAKE EFFECTS

(B)MACH = .80

DATA SET SYMBOL: (VEJ024) (VEJ038)

CONFIGURATION DESCRIPTION: ARC 11-747 OAS3A B C M F VI V NOM: RN/L ARC 11-747 OAS3A B C M F VI V NOM: RN/L

ELE/ON: .000 .000

AIR/ON: .000 .000

BDF/LAP: -11.700 -11.700

DSB: 55.000 85.000

REFERENCE INFORMATION:

SREF	2.4210	SQ.FT.
LREF	14.2440	
BREF	28.1004	
XMRP	32.3010	
YMRP	11.0000	
ZMRP	11.2500	
SCALE	.0300	SCALE

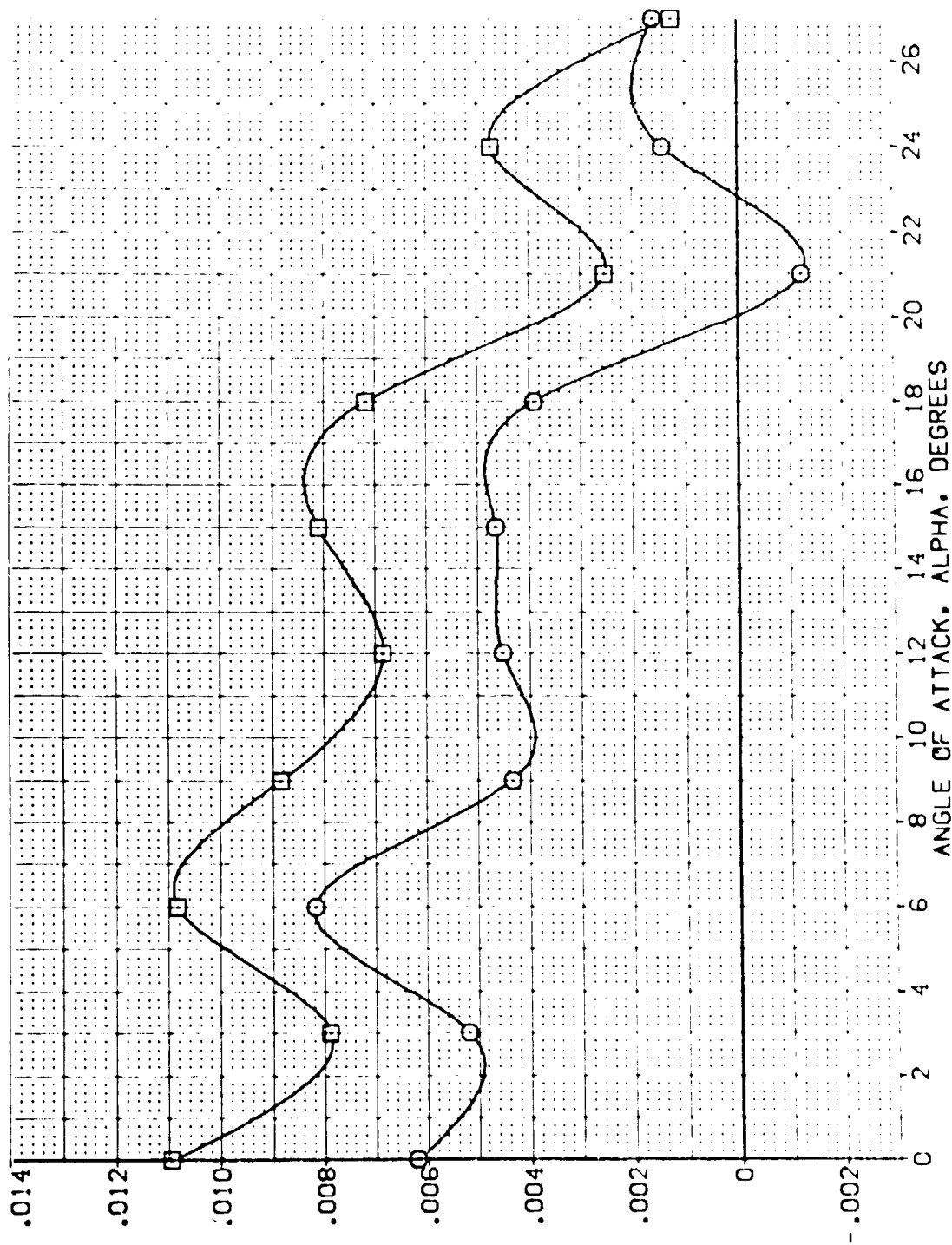


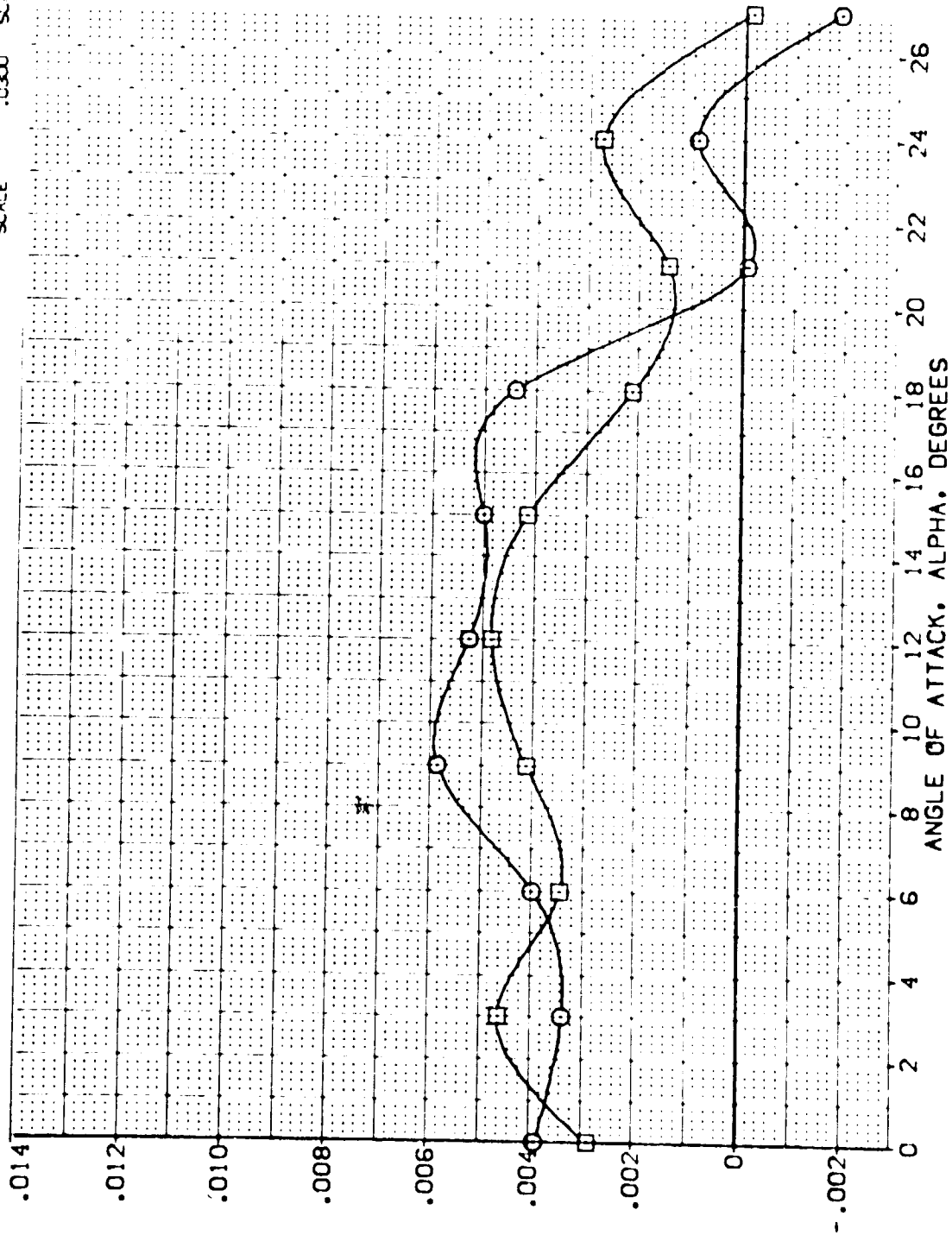
FIG. 9 SPEEDBRAKE EFFECTS

(C)MACH = .90

DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 {VEJ024} [ ] ARC 11-747 CAS3A B C M F V V NOM: RV/L  
 {VEJ038} [ ] ARC 11-747 CAS3A B C M F V V NOM: RV/L

ELEVON AILRON BOFLAP OSB  
 .000 .000 -11.700 55.000  
 .000 .000 -11.700 65.000

REFERENCE INFORMATION  
 SREF 2.4210 SQ.FT.  
 LREF 14.2440  
 BREF 28.1004  
 XMRP 32.3010  
 YMRP .0000  
 ZMRP 11.7500  
 SCALE .0300



INCREMENTAL BASE AXIAL FORCE COEFFICIENT, DCAB

FIG. 9 SPEEDBRAKE EFFECTS

(C)MACH = 1.05

DATA SET SYMBOL CONFIGURATION DESCRIPTION

ARC 11-747	QAS3A	B	C	M	F	V	V	NON	RVUL	ELEVON	AILRON	BOFLAP	DSB	REFERENCE INFORMATION
VEJ024														SREF 2.4210 SQ.FT.
VEJ038														LREF 14.2440
														BREF 28.1004
														ZMRP 32.3010
														ZMRP .0000
														ZMRP 11.2500
														SCALE .0000

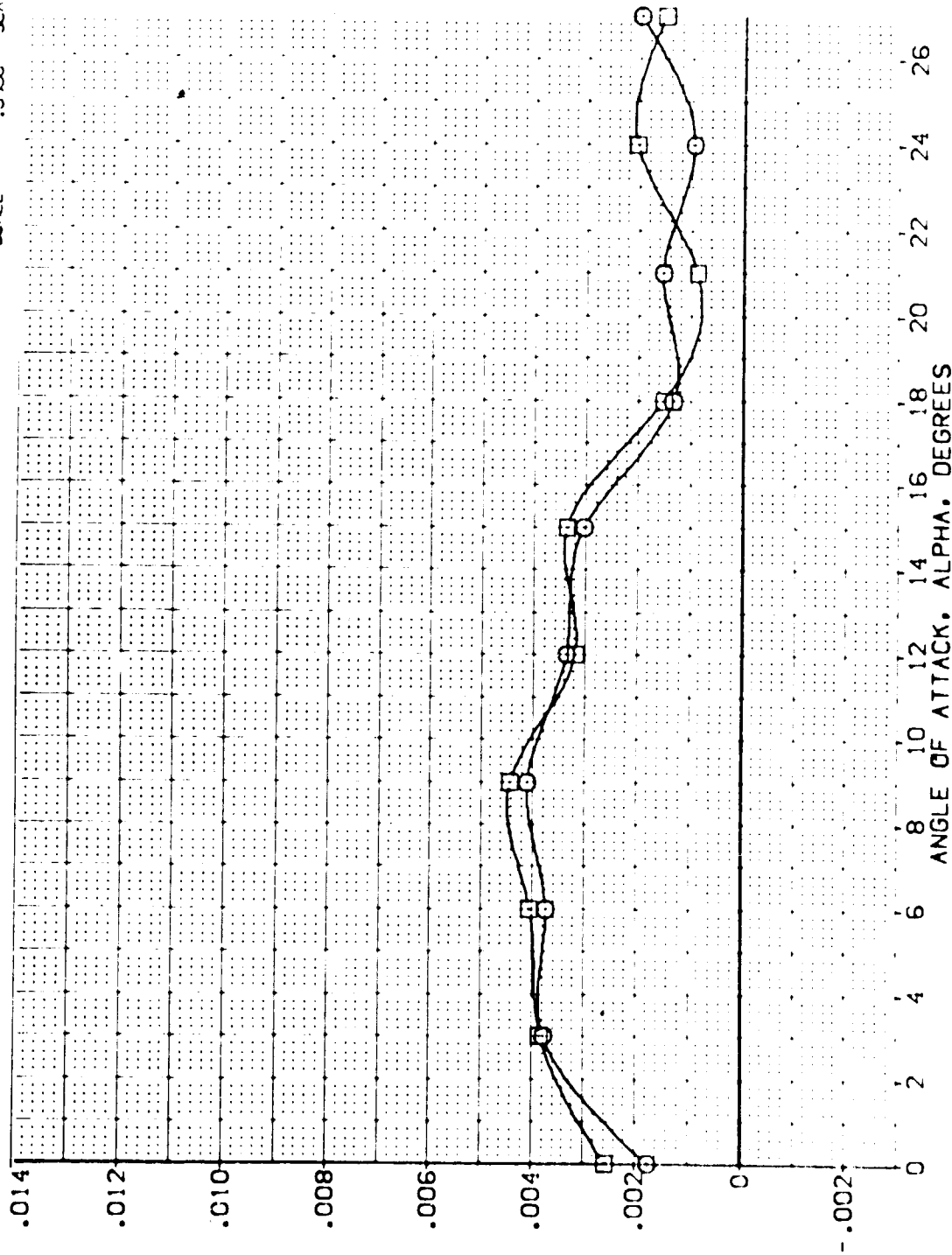


FIG. 9 SPEEDBRAKE EFFECTS

(E) MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	DSB	REFERENCE INFORMATION	
(VEJ024)	ARC 11-747 BA53A B C H F V I V	.000	.000	-11.700	55.000	SREF	2.4210
(VEJ038)	ARC 11-747 BA53A B C H F V I V	.000	.000	-11.700	65.000	LREF	14.2410
						BREF	28.1004
						XREF	32.3010
						YREF	.0000
						ZREF	11.2500
						SCALE	.0300

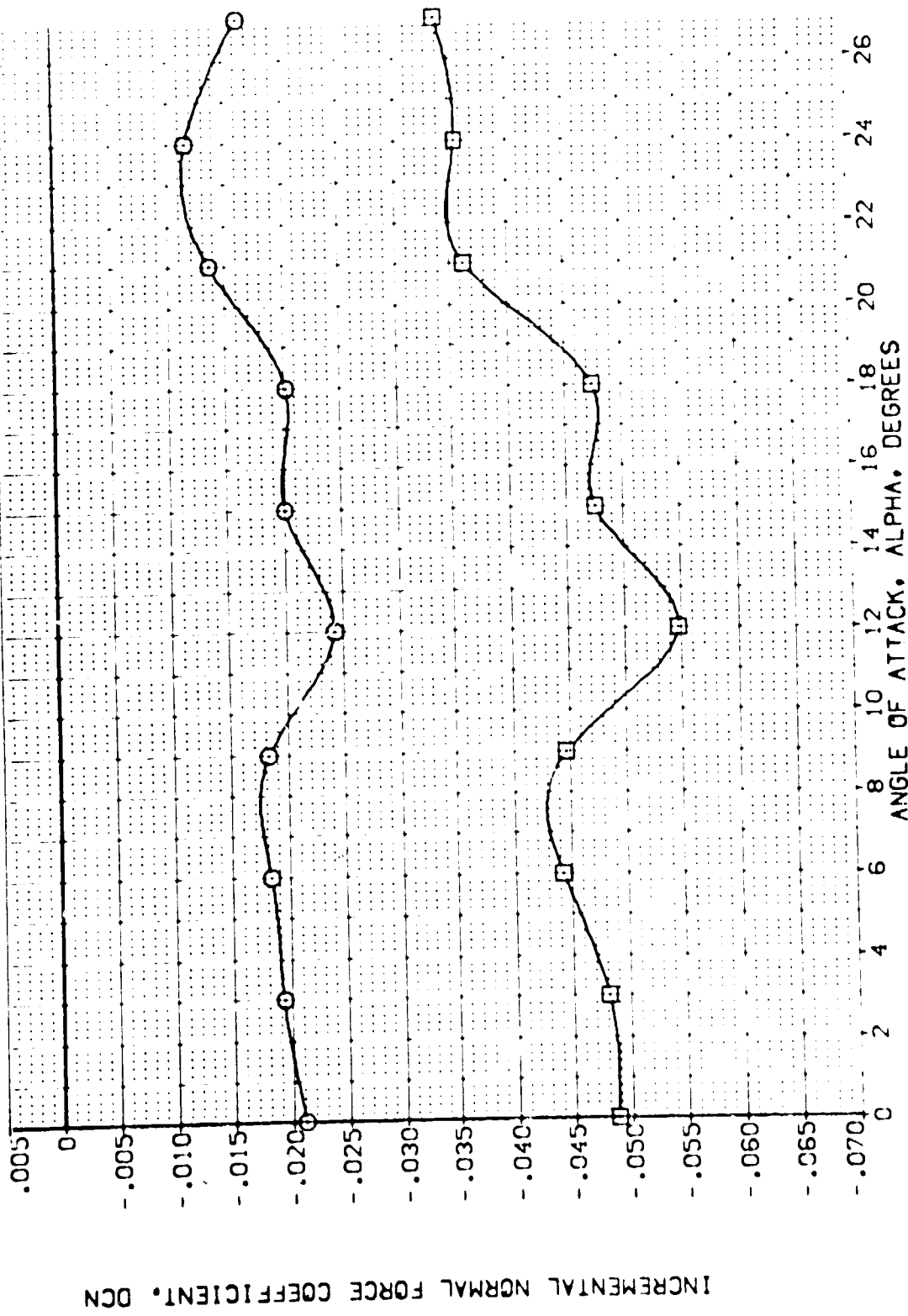


FIG. 9 SPEEDBRAKE EFFECTS

(A) MACH = .60



DATA SET SYMBOL    CONFIGURATION DESCRIPTION    ELEVON    AIRLON    BOFLAP    DSB    REFERENCE INFORMATION

{VEJ024}	ARC 11-747 CAS3A B C M F VI V	NON: RN/L	.000	-11.700	55.000	SREF	2.4210	50.000
{VEJ038}	ARC 11-747 CAS3A B C M F VI V	NON: RN/L	.000	-11.700	85.000	LREF	14.2440	
						BREF	28.1004	
						XMRP	32.3010	
						YMRP	.0000	
						ZMRP	11.2500	
						SCALE	.0300	SCALE

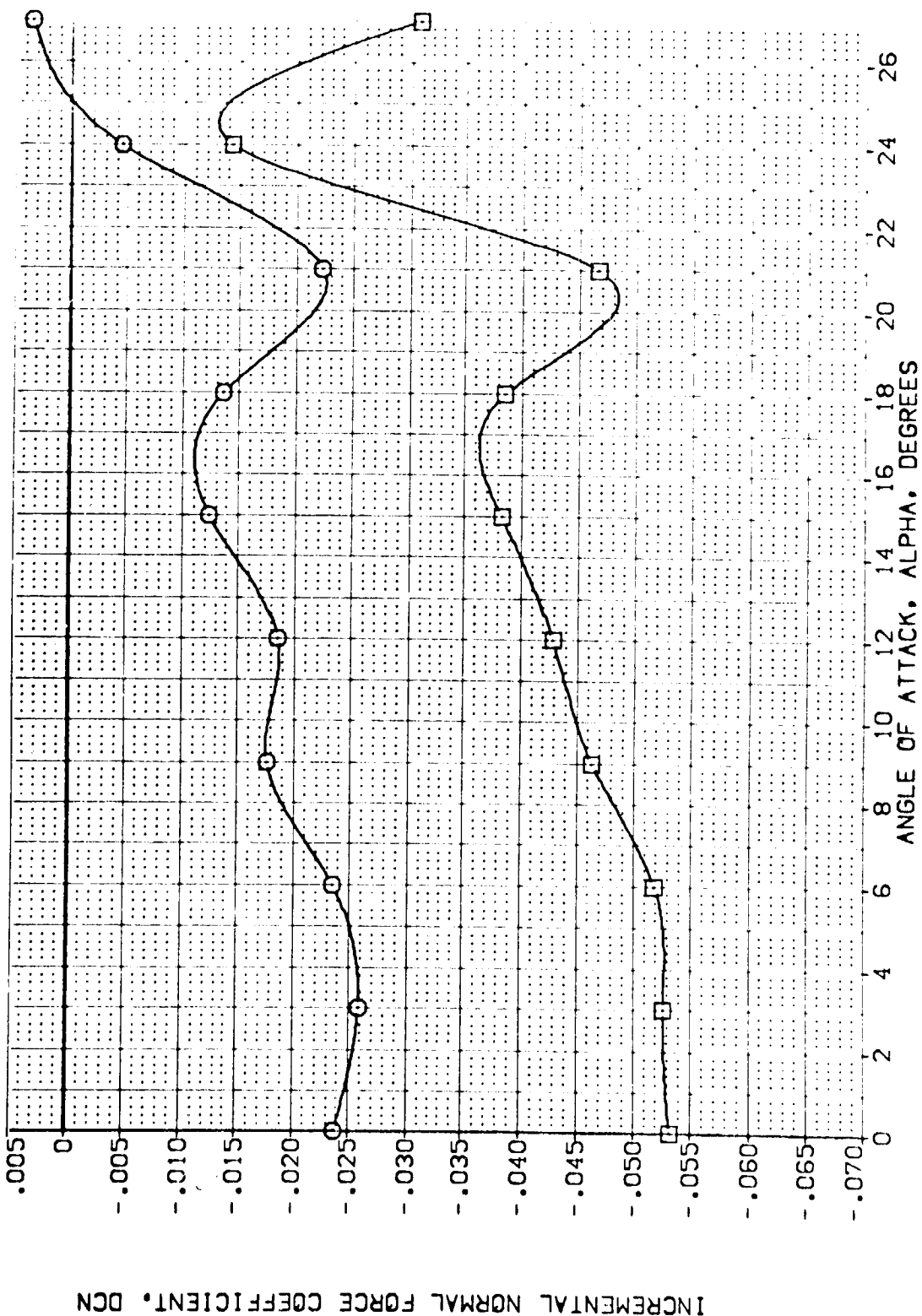


FIG. 9 SPEEDBRAKE EFFECTS

(B)MACH = .80

DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 (VEJ024) ARC 11-747 CAS3A B C H F V I V NOM: RV/L  
 (VEJ038) ARC 11-747 CAS3A B C H F V I V NOM: RV/L

ELEVON AILRON BDFLAP DSB  
 .000 .000 -11.700 55.000  
 .000 .000 -11.700 65.000

REFERENCE INFORMATION  
 SREF 2.4210 SC.FT.  
 LREF 14.2440  
 BREF 28.1004  
 XMRP 32.3010  
 YMRP .0000  
 ZMRP 11.2500  
 SCALE .0300 SCALE

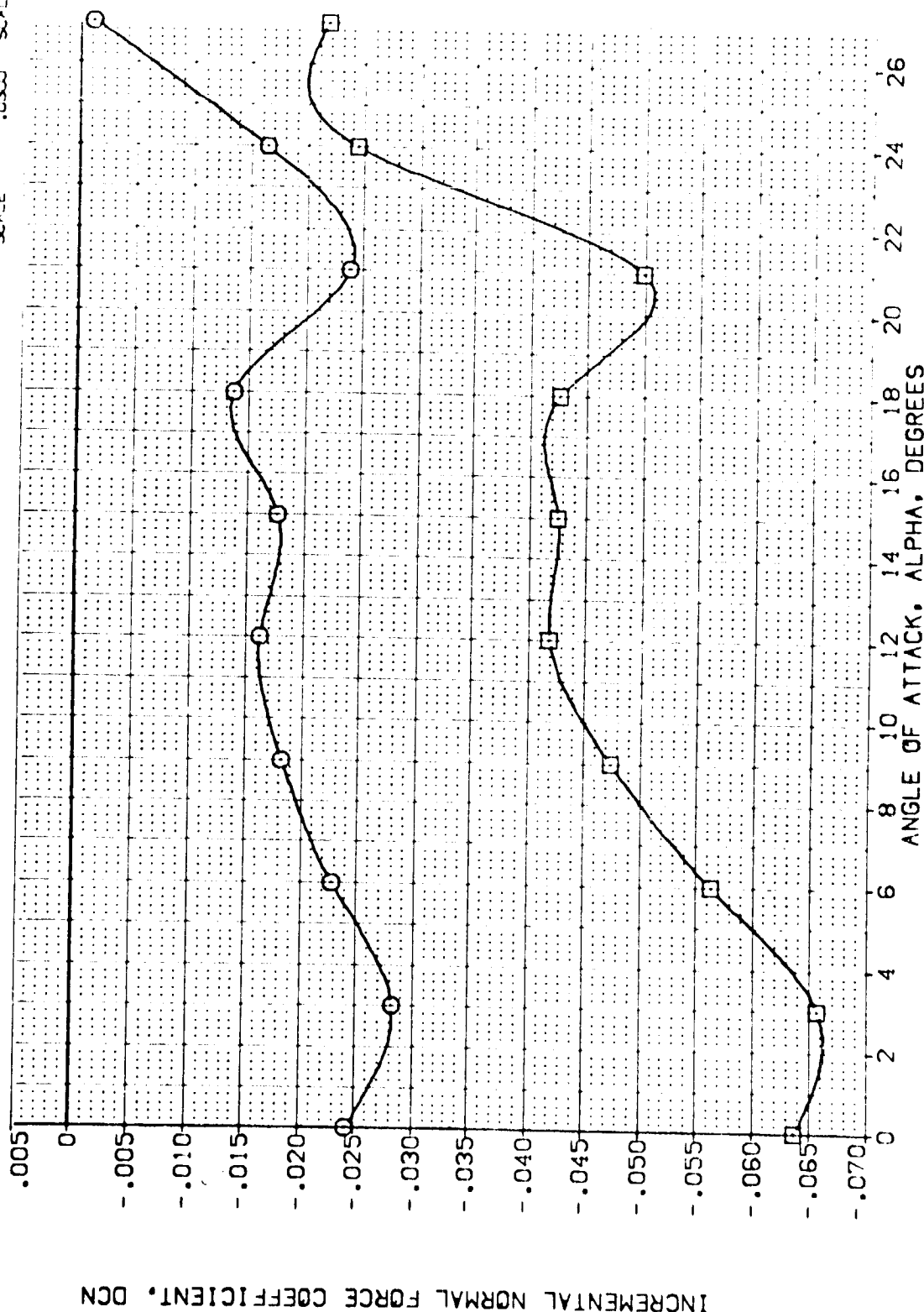


FIG. 9 SPEEDBRAKE EFFECTS

(C)MACH = .90



DATA SET SYMBOL	CONFIGURATION	DESCRIPTION
(VEJ024)	ARC 11-747	QA53A B C M F VI
(VEJ038)	ARC 11-747	QA53A B C M F VI

ELEVEN	AIRLON	BOFLAP	DSB
.000	.000	-11,700	55,000
.000	.000	-11,700	85,000

REFERENCE INFORMATION	
SREF	2.4210 SO.FT.
LREF	14.2440 IN.
BREF	28.004 IN.
XMRP	32.3010 IN.
YMRP	0.000 IN.
ZMRP	11.2500 IN.
SCALE	.0300 SCALE

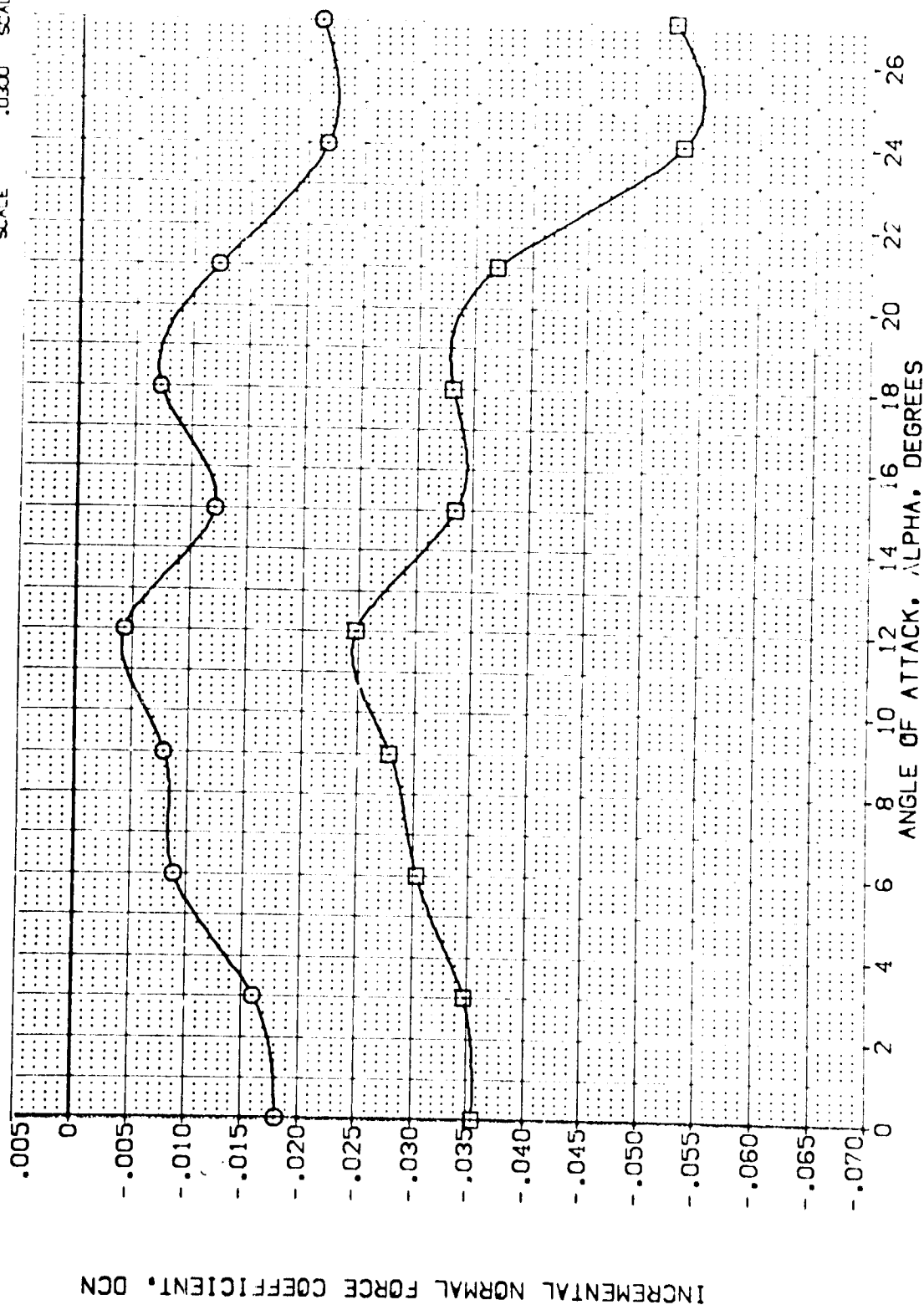


FIG. 9 SPEEDBRAKE EFFECTS

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CD)MACH = 1.05

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DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BDF LAP	DSB	REFERENCE INFORMATION
{VEJ024}	ARC 11-747 BA33A B C M F V1 V	.000	.000	-11.700	55.000	SREF 2.4210 SQ.FT.
{VEJ038}	ARC 11-747 BA53A B C M F V1 V	.000	.000	-11.700	65.000	LREF 14.2140
						BREF 28.1004
						XREF 32.3010
						YREF .0000
						ZREF 11.2500
						SCALE .0300

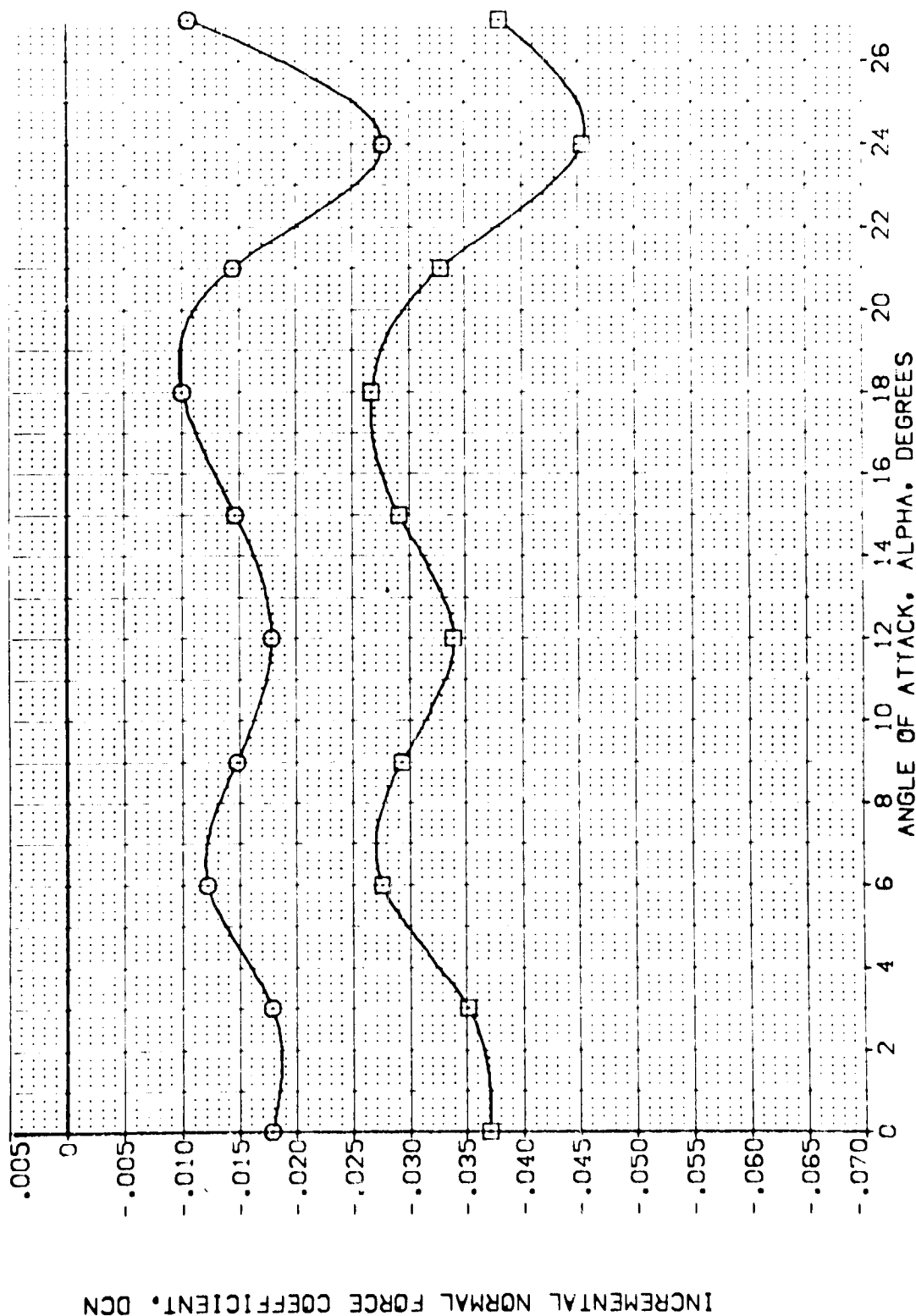


FIG. 9 SPEEDBRAKE EFFECTS

(E)MACH = 1.20

DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 (VEJ024) ARC 11-747 DA53A B C M F VI V NOM: RV/L  
 (VEJ038) ARC 11-747 DA53A B C M F VI V NOM: RV/L

ELEVON AILERON BOFLAP DSB  
 .000 .000 -11.700 55.000  
 .000 .000 -11.700 85.000

REFERENCE INFORMATION  
 SREF 2.4210 SQ.FT.  
 LREF 14.2440 IN.  
 BREF 28.1004 IN.  
 YMRP 32.3010 IN.  
 ZMRP .0000 IN.  
 SCALE 11.2500 IN.  
 .0300

INCREMENTAL PITCHING MOMENT COEFFICIENT (FWD C.G.). DCMFWD

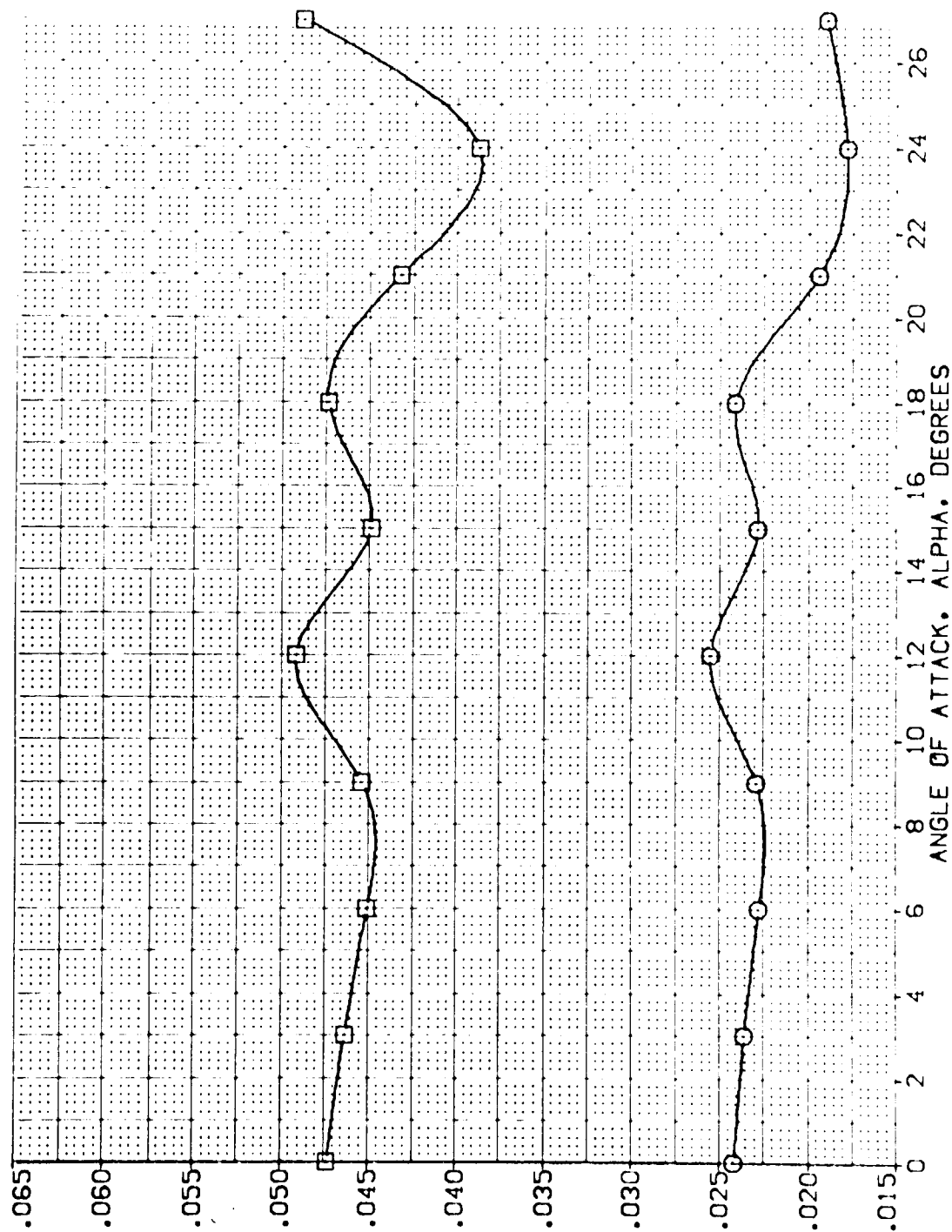


FIG. 9 SPEEDBRAKE EFFECTS

(A) MACH = .60



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	D5B	REFERENCE INFORMATION
[VEJ074]	ARC 11-747 0A53A B C H F V	.000	.000	-11.700	55.000	SREF 2.4210 SQ.FT.
[VEJ038]	ARC 11-747 0A53A B C H F V	.000	.000	-11.700	65.000	LREF 14.2440
						BREF 28.1004
						AREF 32.3010
						YREF 11.2500
						SCALE 1.0300

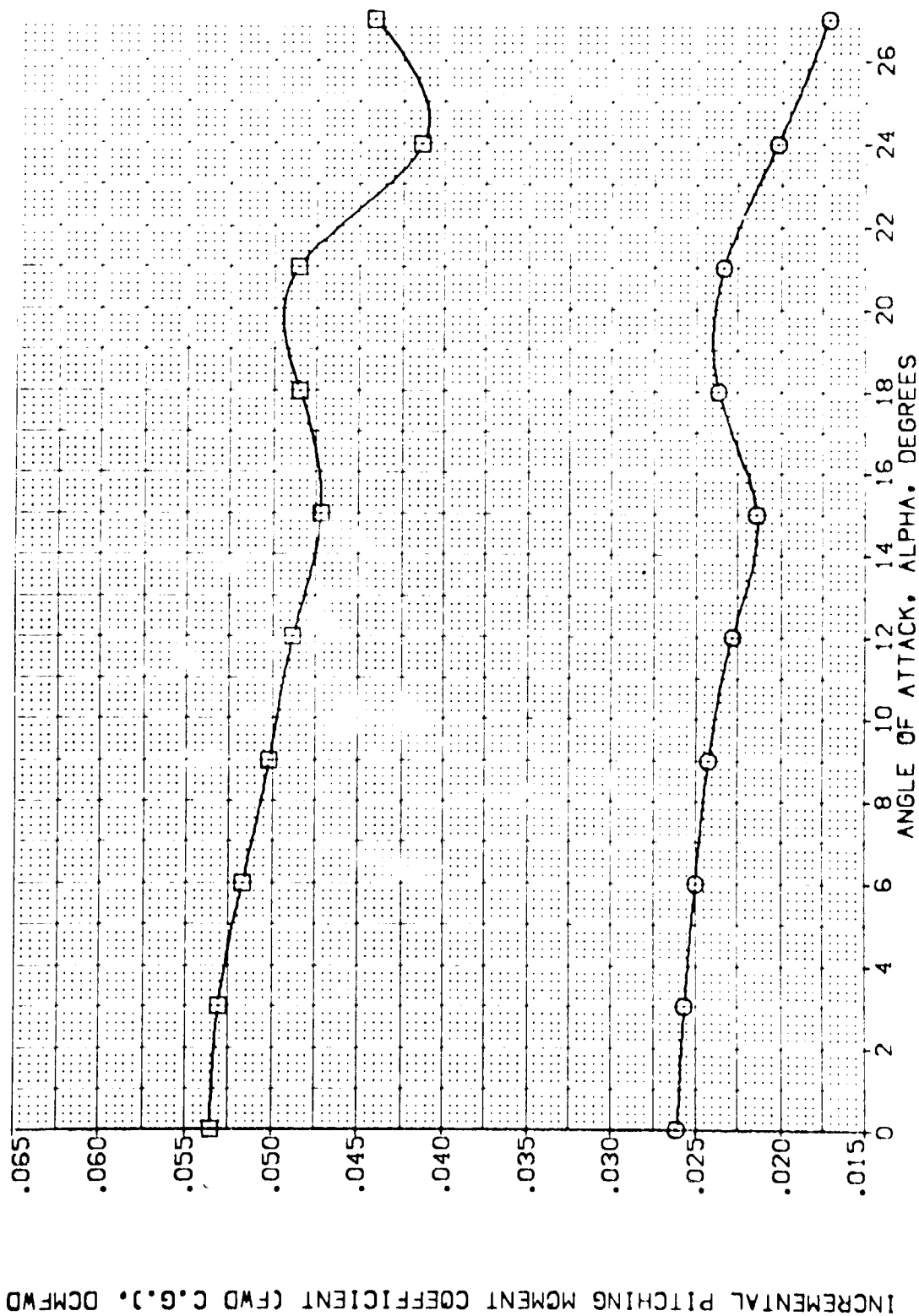


FIG. 9 SPEEDBRAKE EFFECTS

(B)MACH = .80

DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 (VEJ024J) ARC 11-747 BA53A B C M F V I V NOM, RV/L  
 (VEJ038J) ARC 11-747 BA53A B C M F V I V NOM, RV/L

ELEVON AILRON BOFLAP OSB  
 .000 .000 -11.700 55.000  
 .000 .000 -11.700 85.000

REFERENCE INFORMATION  
 SREF 2.4210 50.00  
 LREF 14.2440 11.00  
 BREF 28.1004 11.00  
 XMRP 32.3010 11.00  
 YMRP .0000 11.00  
 ZMRP .0000 11.00  
 SCALE .0300 11.00

INCREMENTAL PITCHING MOMENT COEFFICIENT (FWD C.G.), DCMFWD

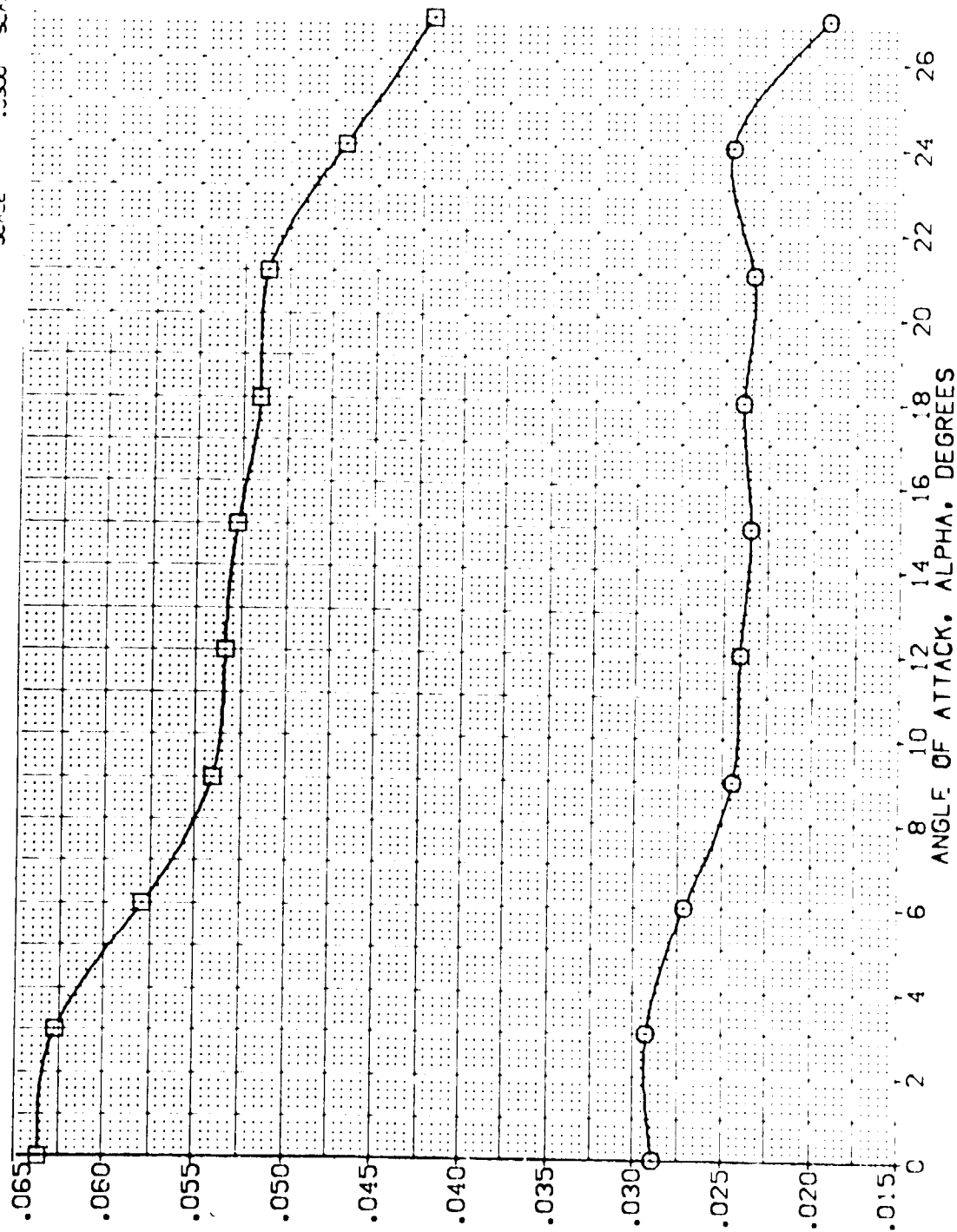


FIG. 9 SPEEDBRAKE EFFECTS

(C)MACH = .90



DATA SET SYMBOL: [VEJ024] [VEJ038]  
CONFIGURATION DESCRIPTION: ARC 11-747 CAS3A B C H F V; V NON; RV/L  
ELEVON: .000 .000  
AILURON: .000 .000  
BOFLAP: -11.700 -11.700  
DSB: 55.000 85.000  
REFERENCE INFORMATION: SREF 2.4210 SQ.FT.  
LREF 14.2443  
BREF 28.1004  
XREF 32.3000  
YREF 11.2500  
ZREF .0300  
SCALE

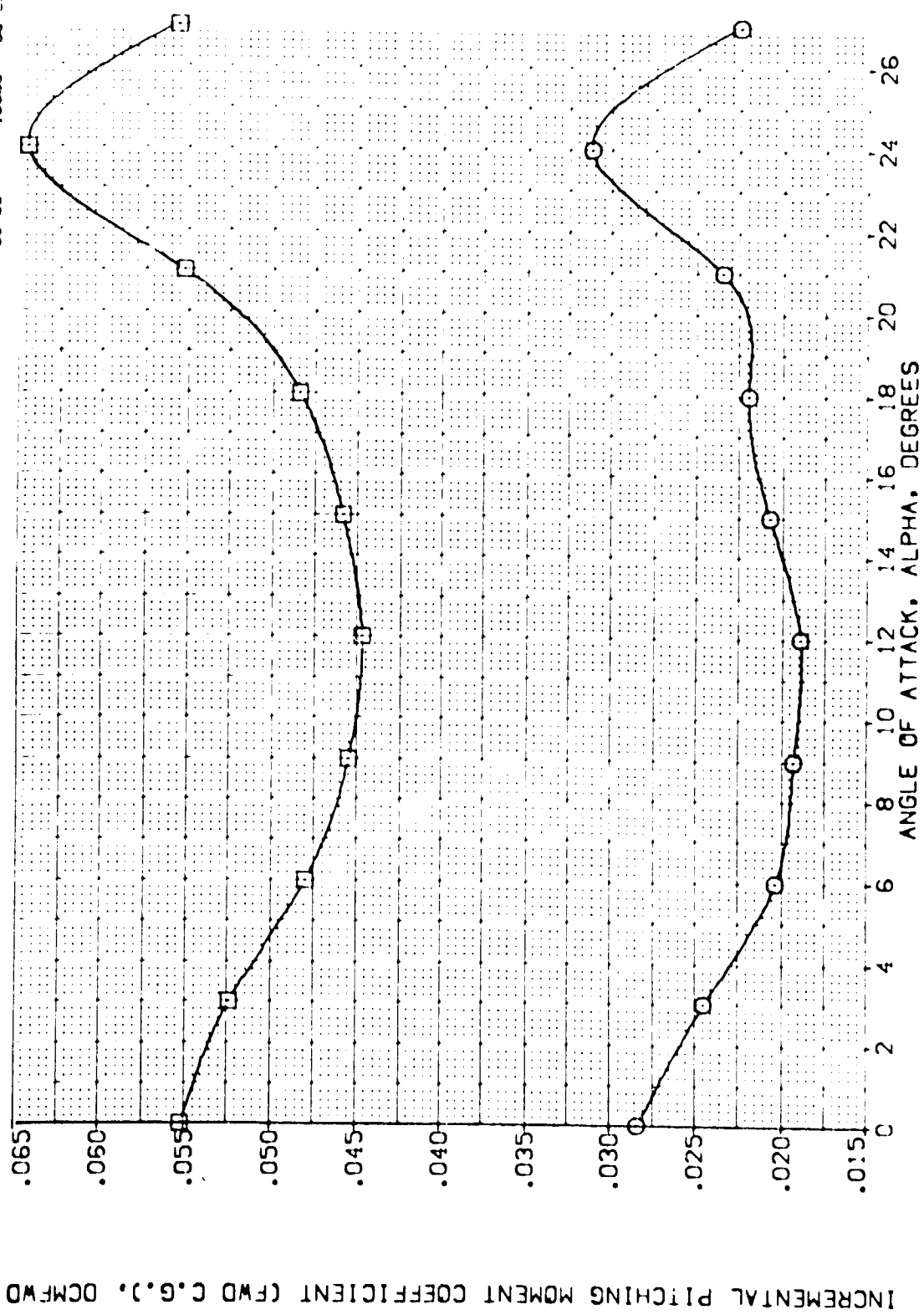


FIG. 9 SPEEDBRAKE EFFECTS

(C)MACH = 1.05





DATA SET SYMBOL: (VEJ024) (VEJ038)

CONFIGURATION DESCRIPTION: ARC 11-747 BAS3A B C M F V I V NOM: RV/L ARC 11-747 BAS3A B C M F V I V NOM: RV/L

ELEVON: .000 .000 .000 .000

AILERON: .000 .000 .000 .000

BDFLAP: -11.700 -11.700

DSB: 55.000 85.000

REFERENCE INFORMATION: SREF: 2.4210 SQ.FT. LREF: 14.2440 BREF: 28.1004 XMRP: 32.3010 YMRP: 11.2500 ZMRP: .0300 SCALE

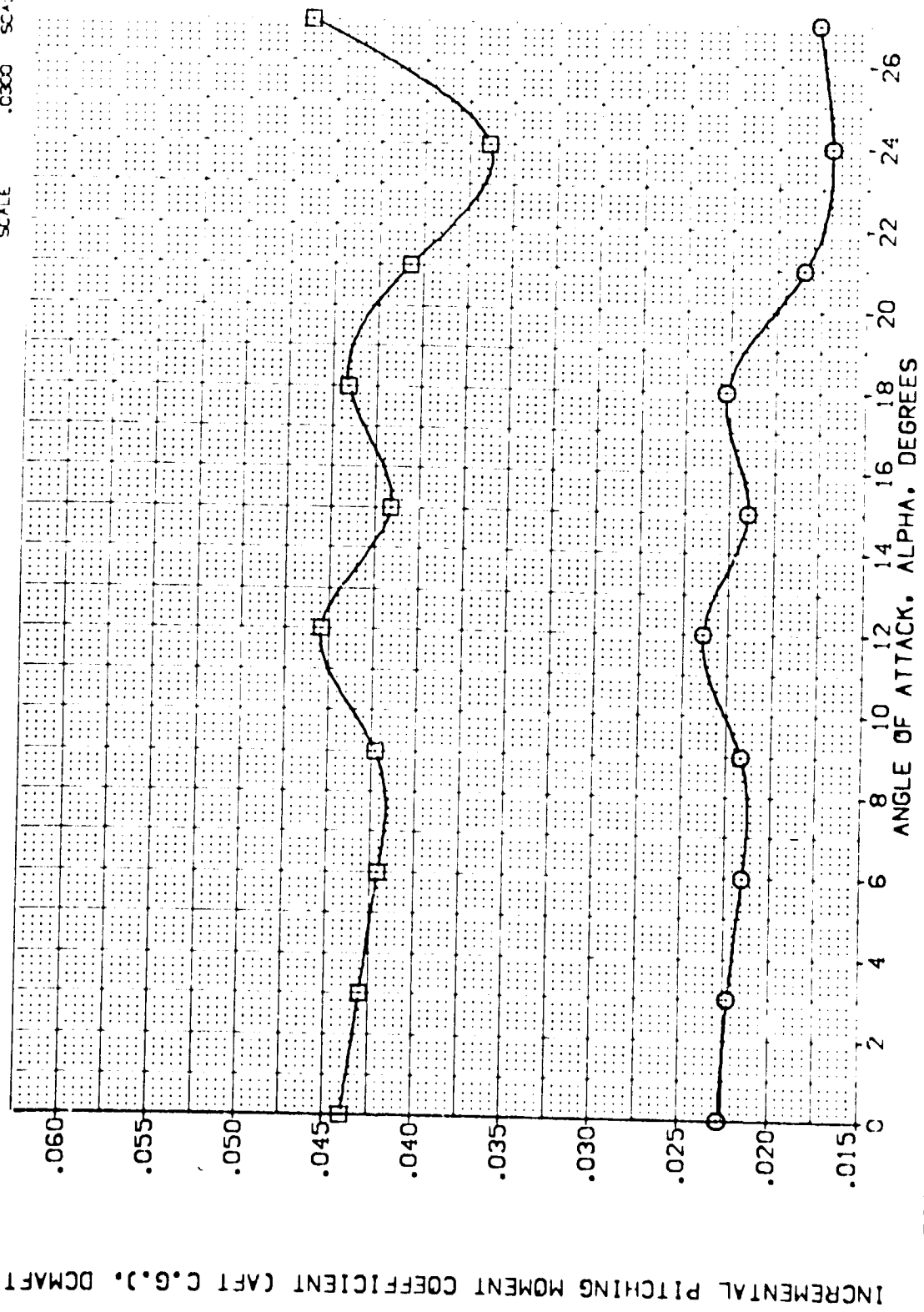


FIG. 9 SPEEDBRAKE EFFECTS

(MACH = .60)





DATA SET SYMBOL CONFIGURATION DESCRIPTION REFERENCE INFORMATION

(VEJ024) Q ARC 11-747 DA53A B C M F V I V NOM: RV/L SREF 2.4210 SQ. FT.

(VEJ038) Q ARC 11-747 DA53A B C M F V I V NOM: RV/L LREF 14.2442

BREF 28.1004

XMRP 32.3010

YMRP .0000

ZMRP 11.7500

SCALE .0300

ELEVON ALLRON BDF LAP DSB

.000 .000 -11.700 55.000

.000 .000 -11.700 85.000

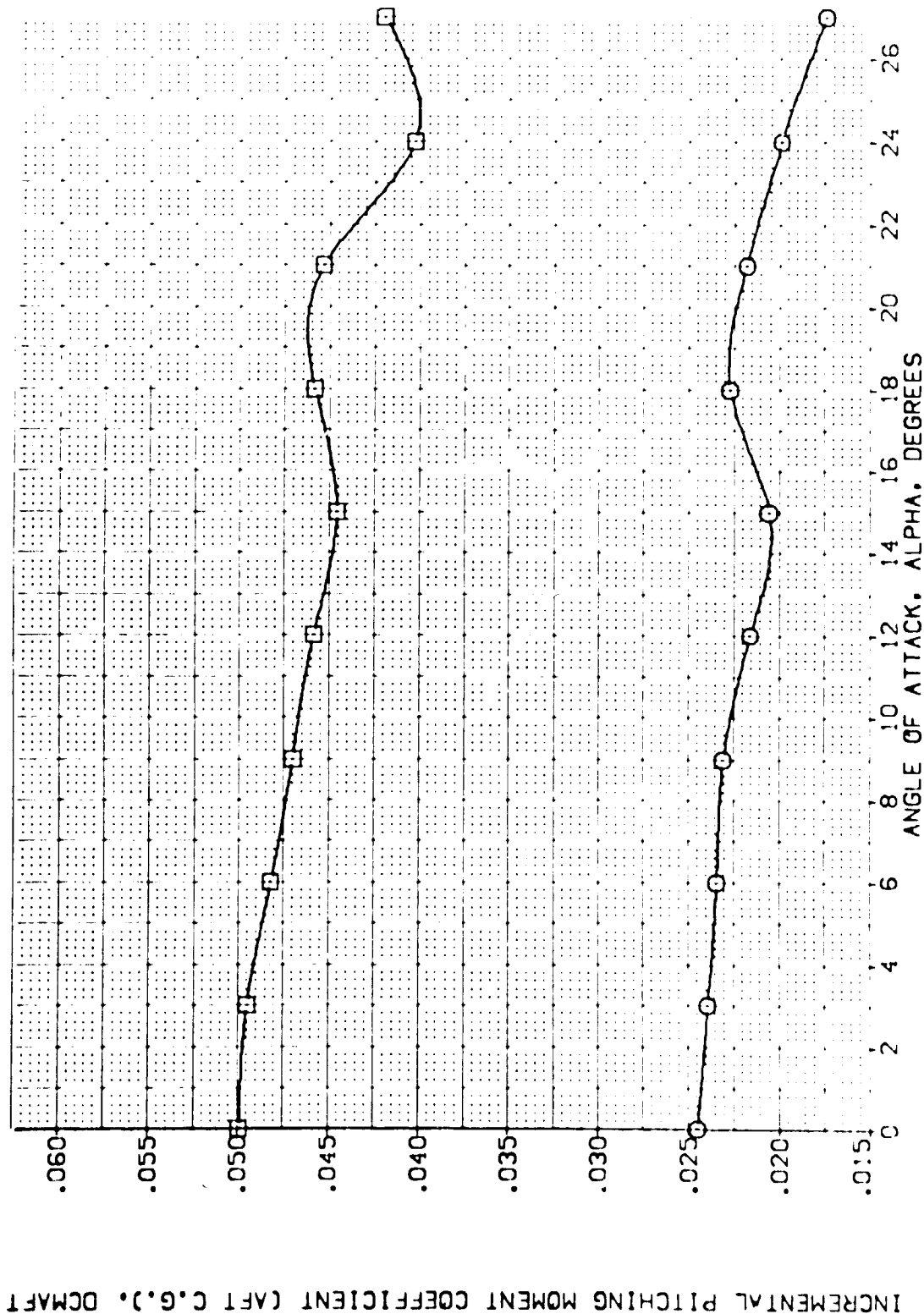


FIG. 9 SPEEDBRAKE EFFECTS

(B)MAC = .80

DATA SET SYMBOL: [VEJ024] [VEJ038] CONFIGURATION DESCRIPTION: ARC 11-747 OAS3A B C M F VI V NMH RNVL  
 ARC 11-747 OAS3A B C M F VI V NMH RNVL  
 ELEVON: .000 .000 AILRON: .000 .000 BDFLAP: .000 .000 DSB: .000 .000  
 REFERENCE INFORMATION: SREF: 2.4210 SC.FT.: 55.000  
 LREF: 14.2440 SC.FT.: 85.000  
 BREF: 28.1004 SC.FT.: 11.000  
 XMRP: 32.3010 SC.FT.: 11.000  
 YMRP: .0000 SC.FT.: 11.000  
 ZMRP: .0000 SC.FT.: 11.000  
 SCALE: .0300

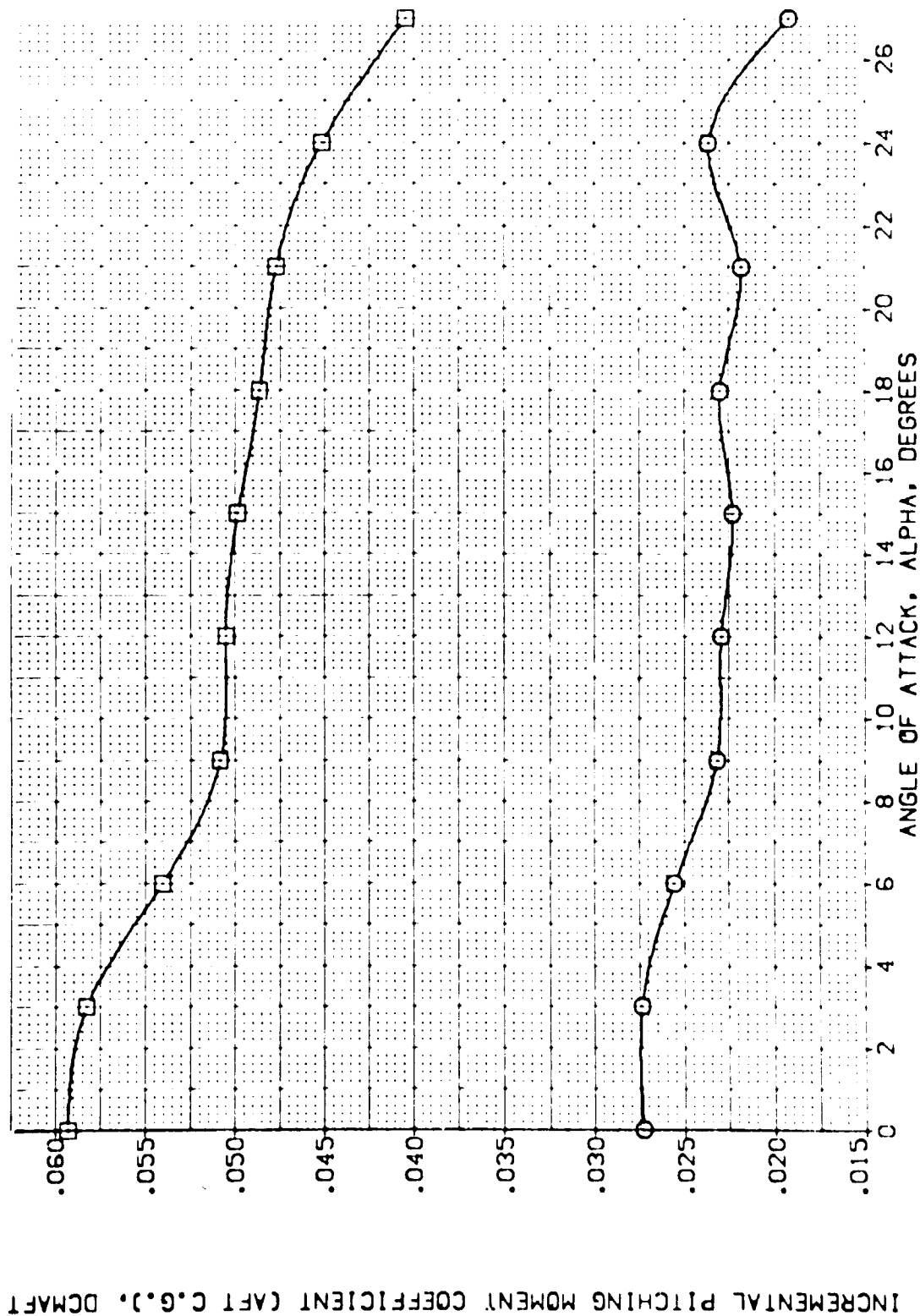


FIG. 9 SPEEDBRAKE EFFECTS

(C)MACH = .90

DATA SET SYMBOL: (VEJ024) (VEJ038)

CONFIGURATION DESCRIPTION: ARC 11-747 OAS3A B C M F VI V NOM: RV/L ARC 11-747 OAS3A B C M F VI V NOM: RV/L

ELEVON: .000 .000 .000

AILERON: .000 .000 .000

BOFLAP: .000 .000 .000

DSB: 55.000 85.000

REFERENCE INFORMATION: SREF: 2.4210 SQ. FT. LREF: 14.244C XREF: 28.1004 YREF: 32.3010 ZREF: .0000 SCALE: 11.2500 .0300

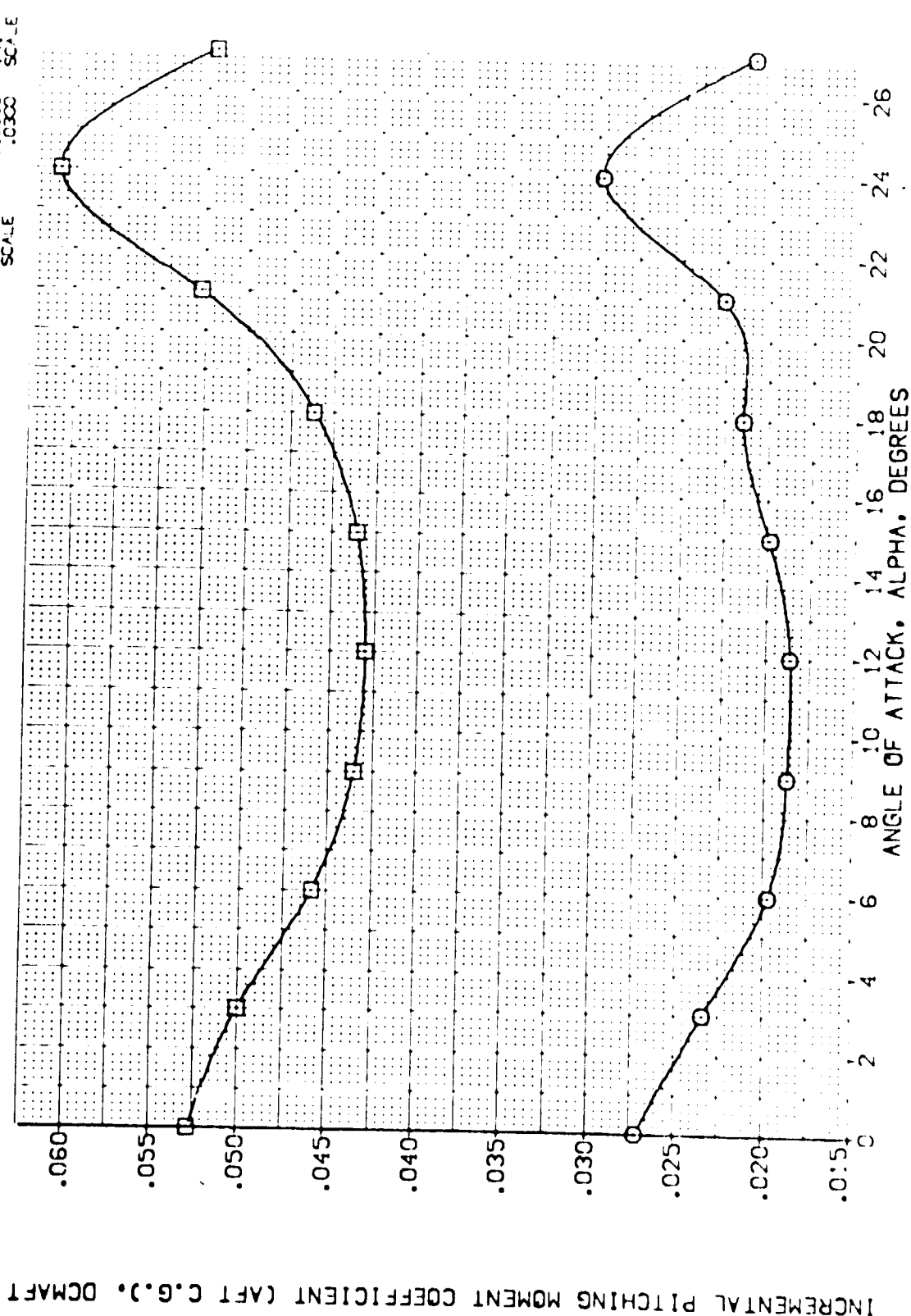


FIG. 9 SPEEDBRAKE EFFECTS

(C)MAC = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	DSB	REFERENCE INFORMATION	
(VEJ074)	ARC 11-747 BA53A B C M F VI V	.000	.000	-11.700	55.000	SREF	2.4210 SQ.FT.
(VEJ038)	ARC 11-747 BA53A B C M F VI V	.000	.000	-11.700	65.000	LREF	14.2440
						BREF	28.1004
						YREF	32.3010
						ZREF	11.2500
						SCALE	.0300

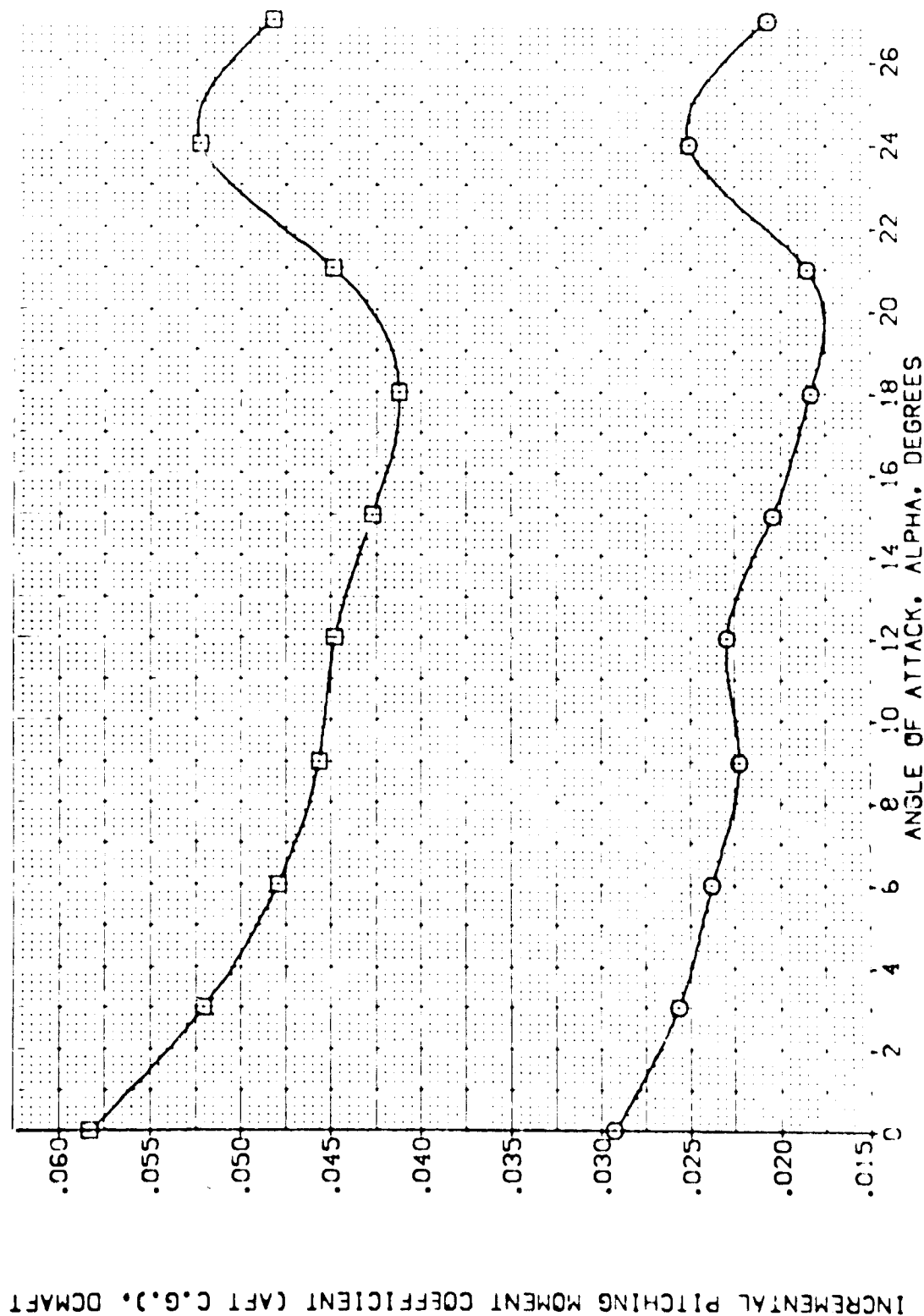


FIG. 9 SPEEDBRAKE EFFECTS

REYNOLDS = 1.20



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AIRLON	BDF LAP	SPDRBK	REFERENCE INFORMATION
[TE4010]	ARC 11-747 DA53A B C M F VI V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
[TE4050]	ARC 11-747 DA53A B C M F VI V	.000	.000	16.300	25.000	LREF 14.2440 IN.
[TE4008]	ARC 11-747 DA53A B C M F VI V	.000	.000	16.300	25.000	BREF 28.1004 IN.
[TE4049]	ARC 11-747 DA53A B C M F VI V	15.000	.000	16.300	25.000	YMRP 32.3010 IN.
						ZMRP .0000 IN.
						SCALE 11.2500 IN.
						SCALE .0300

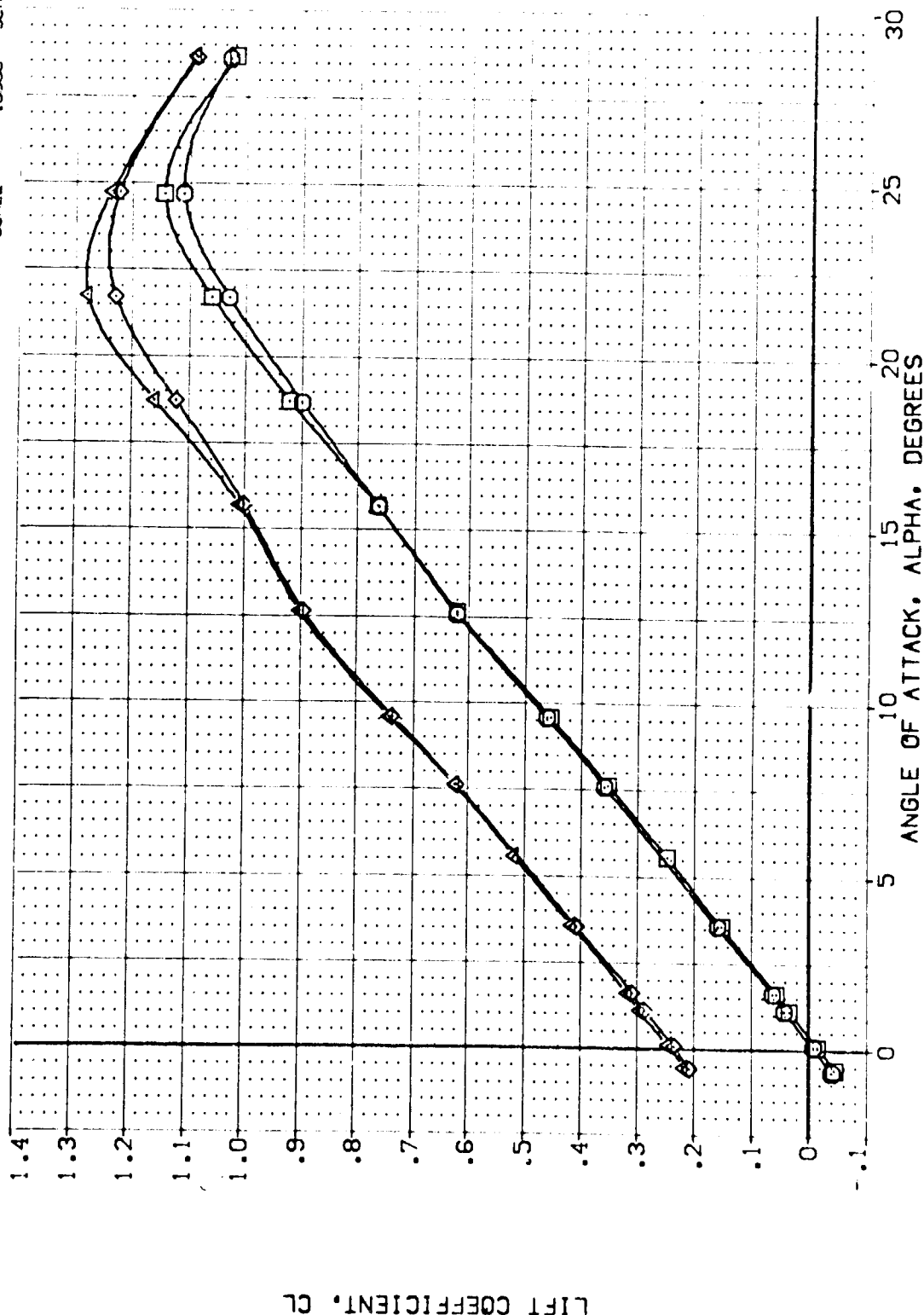


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(A)MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPDBRK	REFERENCE INFORMATION
(TEJ010)	ARC 11-747 CAS3A B C H F V	.000	.000	16.300	25.000	SREF 2.4210 SC.FT.
(TEJ050)	ARC 11-747 CAS3A B C H F V	.000	.000	16.300	25.000	LREF 14.2440
(TEJ008)	ARC 11-747 CAS3A B C H F V	15.000	.000	16.300	25.000	BREF 28.1004
(TEJ049)	ARC 11-747 CAS3A B C H F V	15.000	.000	16.300	25.000	ZMRP 32.3010
						ZMRP .0000
						SCALE 11.2500
						SCALE .0300

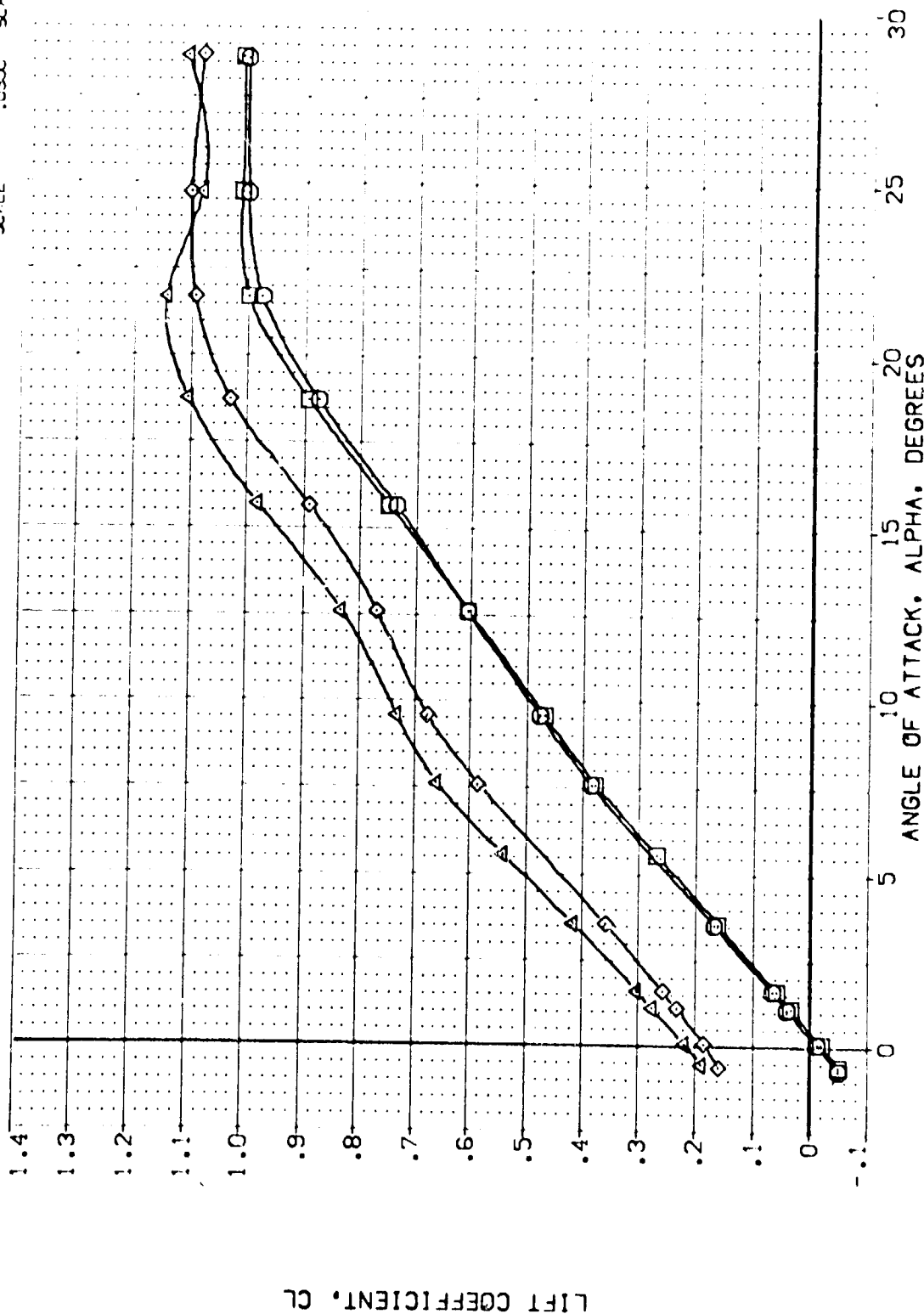


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(B)MACH = .80



DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 (T47010) ARC 11-747 B A 53A B C M F V  
 (T47500) ARC 11-747 B A 53A B C M F V  
 (T47508) ARC 11-747 B A 53A B C M F V  
 (T47509) ARC 11-747 B A 53A B C M F V

ELEVON AILRON BOFLAP SPEEDX  
 .000 .000 .000 25.000  
 .000 .000 .000 25.000  
 .000 .000 .000 25.000  
 .000 .000 .000 25.000  
 15.000 15.000 15.000 15.000  
 15.000 15.000 15.000 15.000  
 15.000 15.000 15.000 15.000  
 15.000 15.000 15.000 15.000

REFERENCE INFORMATION  
 SREF 2.4210 SCALE  
 SREF 14.2440 SCALE  
 SREF 28.1004 SCALE  
 SREF 32.3010 SCALE  
 YMOD 11.0000 SCALE  
 ZMOD 11.2500 SCALE  
 SCALE 10.0000 SCALE

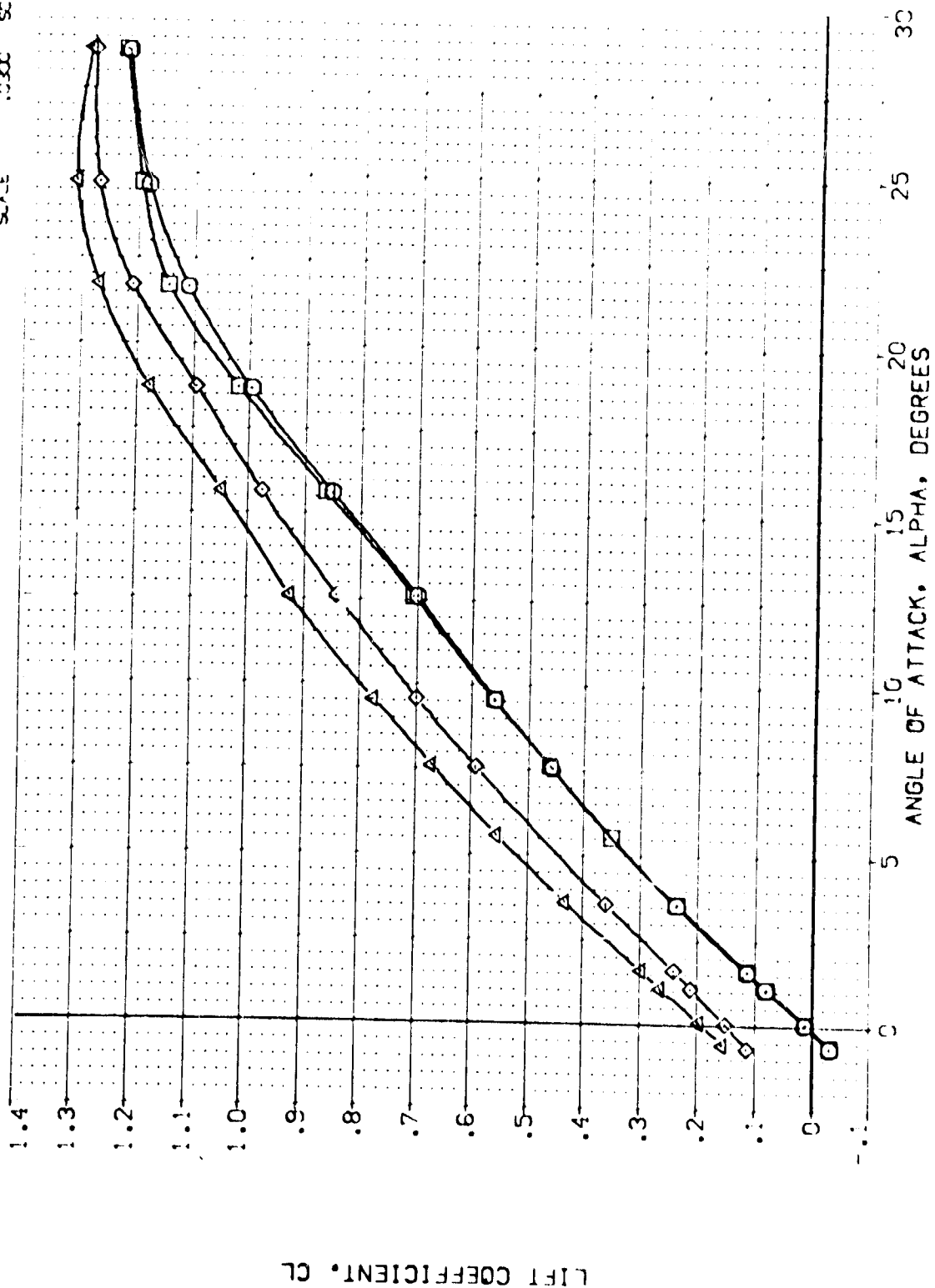


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(C)MAC = 1.05



DATA SET SYMBOL CONFIGURATION DESCRIPTION

[TEJ010]	ARC 11-747 GA53A B C H F V	V
[TEJ050]	ARC 11-747 GA53A B C H F V	V
[TEJ008]	ARC 11-747 GA53A B C H F V	V
[TEJ049]	ARC 11-747 GA53A B C H F V	V

ELEVON  
 .000  
 .000  
 .000  
 15.000  
 15.000

AILURON  
 .000  
 .000  
 .000  
 .000  
 .000

BOFLAP  
 16.300  
 16.300  
 16.300  
 16.300  
 16.300

SPOBRK  
 25.000  
 25.000  
 25.000  
 25.000  
 25.000

REFERENCE INFORMATION

SREF	2.4210	SQ.FT.
LREF	14.2440	
BREF	28.1000	
YMRP	32.3000	
ZMRP	.0000	
SCALE	11.2500	
SCALE	.0300	

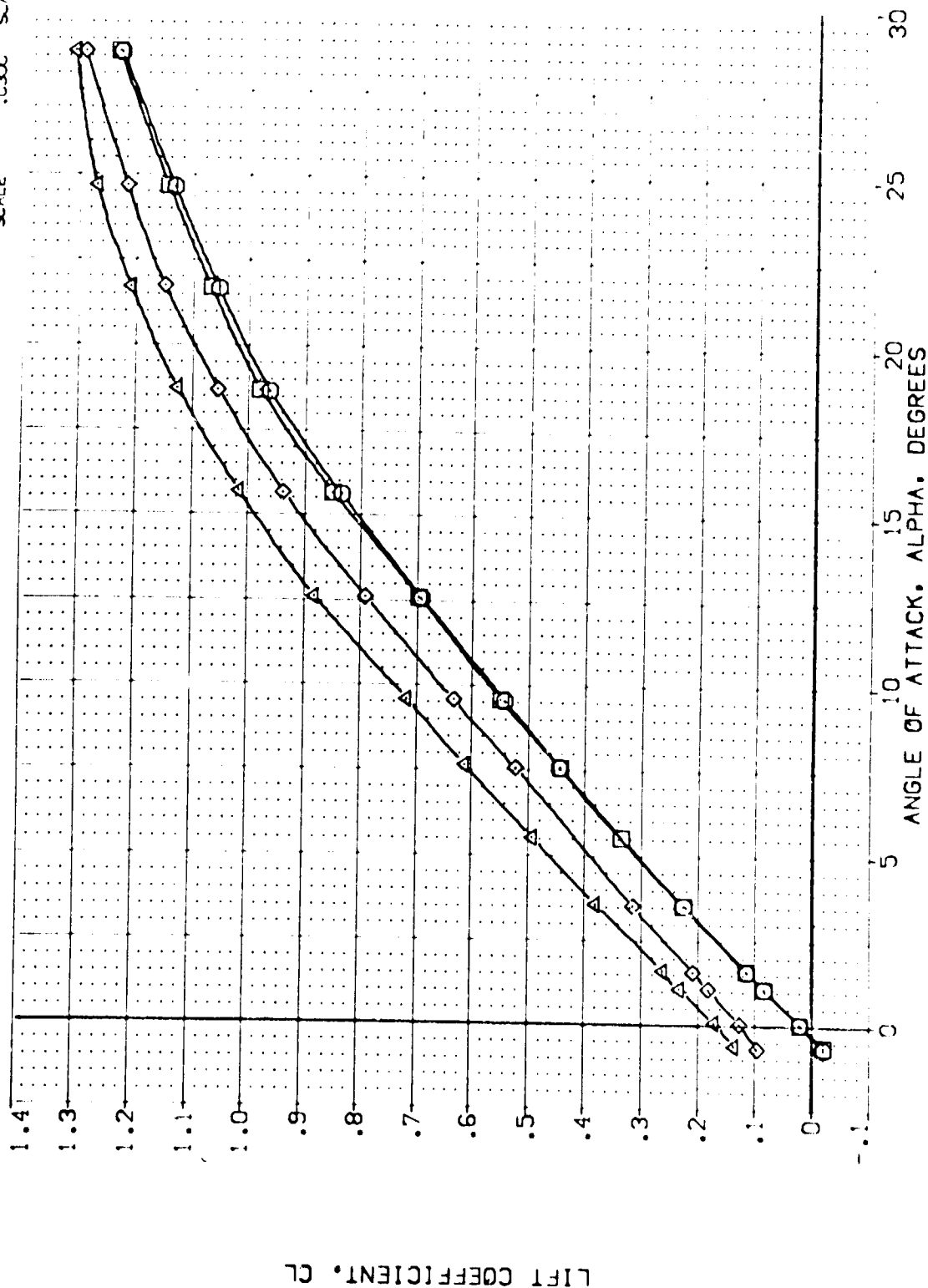


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(E)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NO.	RV/L	SEAL, EL	ELEVON	AIRLON	BD LAP	SPOBRK	REFERENCE INFORMATION
[TEJ010]	ARC 11-747 QAS3A B C M F VI	V			.000	.000	16.300	25.000	SREF 2.4210 SQ. FT.
[TEJ020]	ARC 11-747 QAS3A B C M F VI	V			.000	.000	16.300	25.000	LOEF 14.7440
[TEJ030]	ARC 11-747 QAS3A B C M F VI	V			.000	.000	16.300	25.000	BRFF 28.1004
[TEJ040]	ARC 11-747 QAS3A B C M F VI	V			.000	.000	16.300	25.000	YREF 32.9010
[TEJ050]	ARC 11-747 QAS3A B C M F VI	V			.000	.000	16.300	25.000	ZREF 11.7500
									SCALE .0300

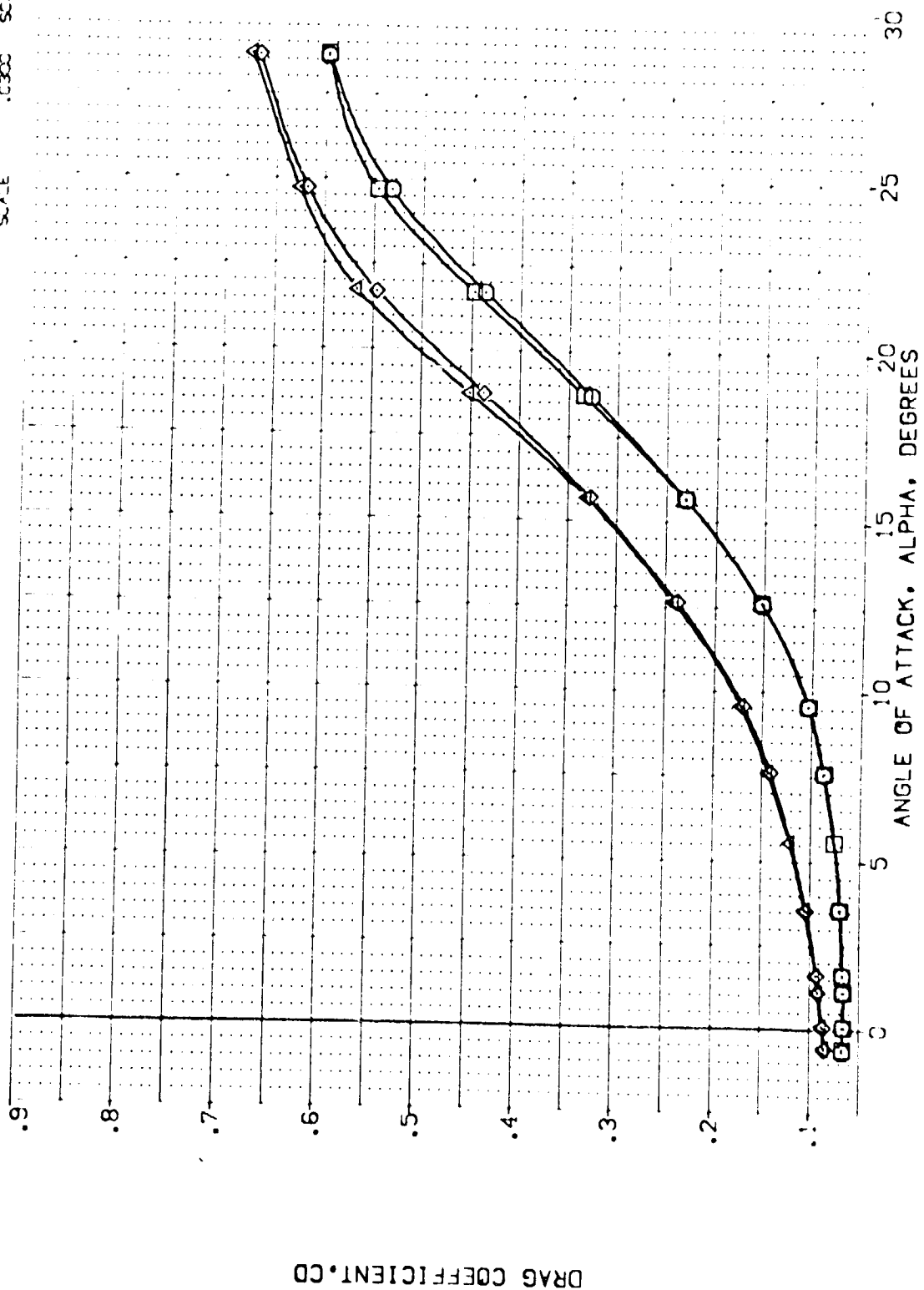


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(MACH = .60)

DATA SET SYMBOL CONFIGURATION DESCRIPTION

Q	ARC	11-747	0A53A	B	C	M	F	V	V
X	ARC	11-747	0A53A	B	C	M	F	V	V
X	ARC	11-747	0A53A	B	C	M	F	V	V
X	ARC	11-747	0A53A	B	C	M	F	V	V

ELEVON

AILTRON	BC LAP	SPDRK
.000	16.300	25.000
.000	16.300	25.000
.000	16.300	25.000
.000	16.300	25.000

REFERENCE INFORMATION

SPREF	2.4210	50.00
LPREF	14.2440	100.00
BPREF	28.1000	100.00
MPREF	37.3000	100.00
ZMPREF	11.2500	100.00
SCALE	11.0000	100.00

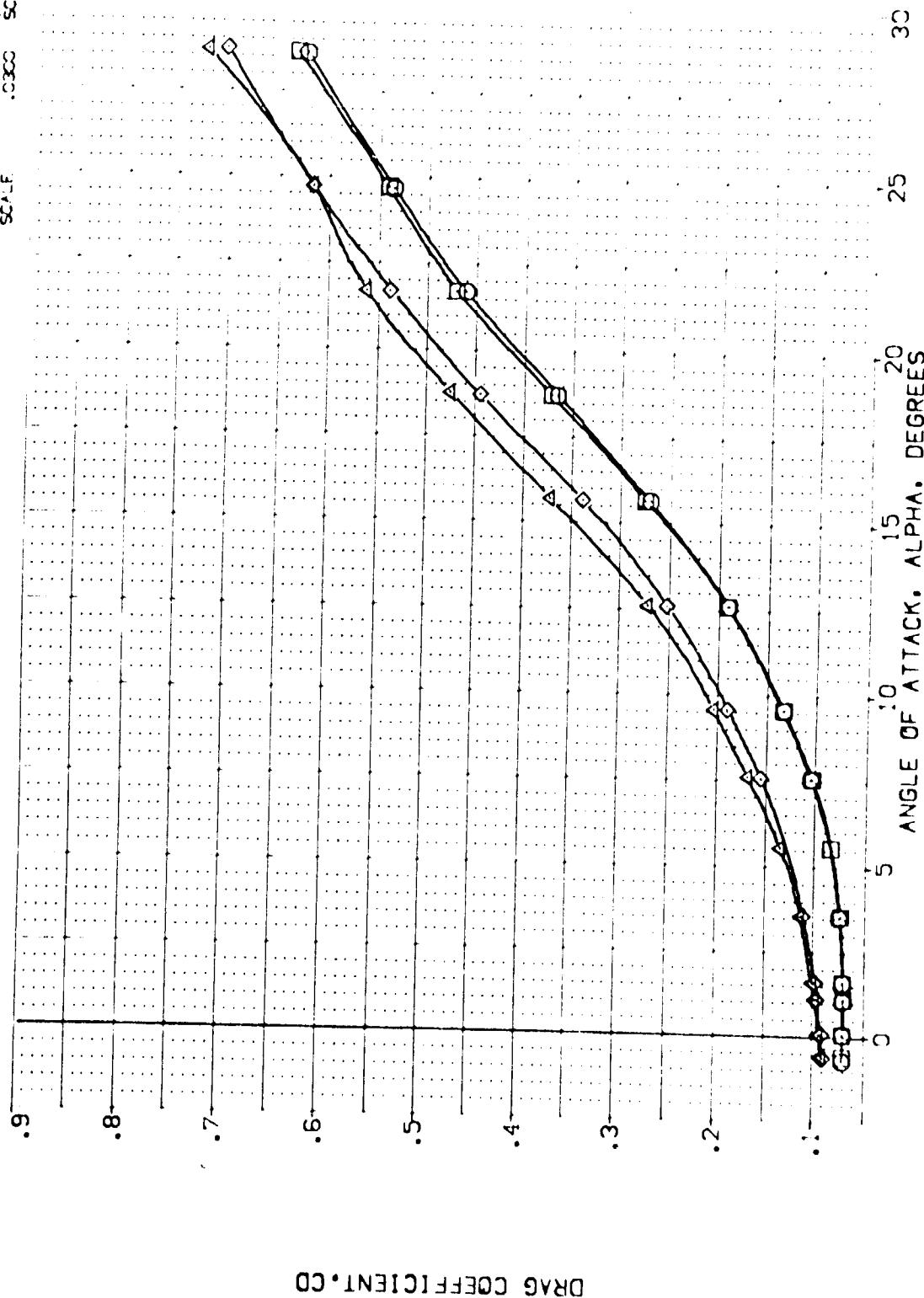


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(B) MACH = .80







DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NOM: RV/L SEAL.EL	ELEVON	A/L/RON	BO/LAP	SPDRK	REFERENCE INFORMATION
(TEJ010)	ARC 11-747 OA53A B C M F V	V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(TEJ050)	ARC 11-747 OA53A B C M F V	V	.000	.000	16.300	25.000	LREF 14.2445 IN.
(TEJ008)	ARC 11-747 OA53A B C M F V	V	15.000	.000	16.300	25.000	BREF 28.1004 IN.
(TEJ049)	ARC 11-747 OA53A B C M F V	V	15.000	.000	16.300	25.000	XMRP 32.3013 IN.
							YMRP .0000
							ZMRP 11.2500
							SCALE .0300

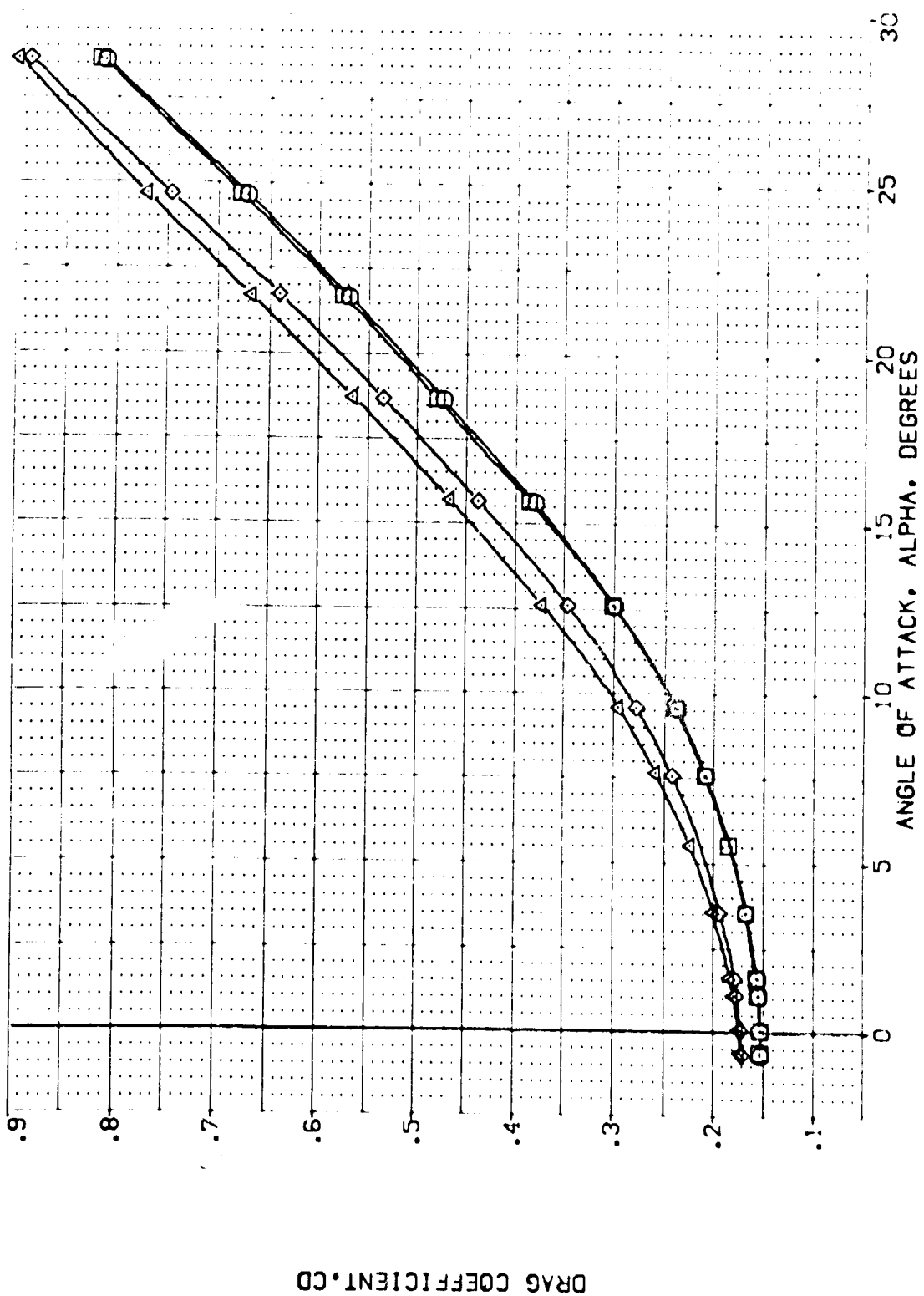


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(C)MACH = 1.20

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(TEJ010)	ARC 11-747	DA53A	B	C	M	F	V	V	NOM	RVUL	SEAL.EL	ELEVON	AILTRON	BDF LAP	SPDRBK
(TEJ050)	ARC 11-747	DA53A	B	C	M	F	V	V	NOM	RVUL	SEAL.EL	.000	.000	15.300	25.000
(TEJ008)	ARC 11-747	DA53A	B	C	M	F	V	V	NOM	RVUL	SEAL.EL	.000	.000	16.300	25.000
(TEJ049)	ARC 11-747	DA53A	B	C	M	F	V	V	NOM	RVUL	SEAL.EL	15.000	.000	16.300	25.000

REFERENCE INFORMATION

SREF	2.4210	SC.FT.
LREF	14.2440	IN.
BREF	28.1004	IN.
XMRP	32.3010	IN.
YMRP	.0000	IN.
ZMRP	11.2500	IN.
SCALE	.0300	SCALE

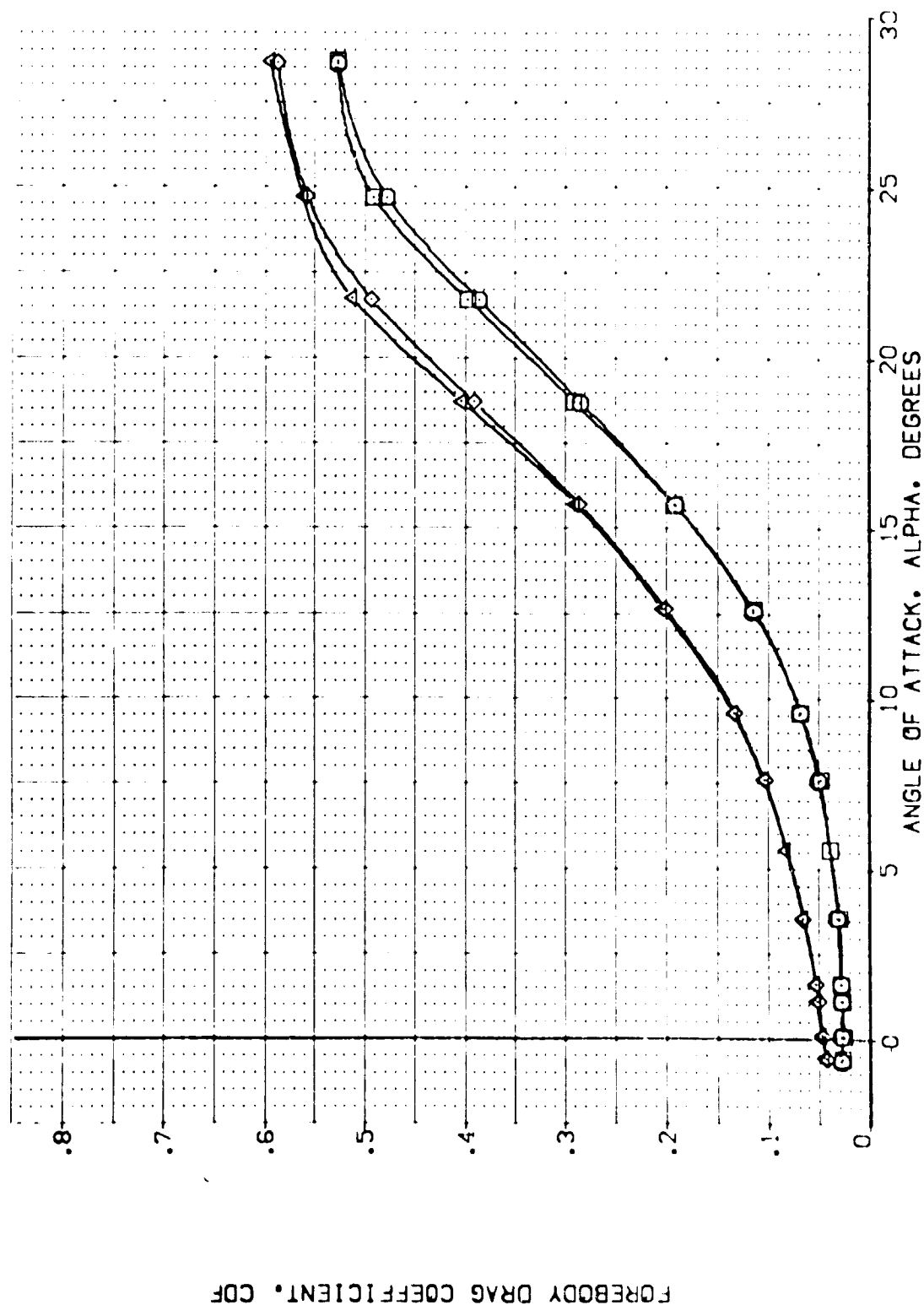


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(A)MACH = .60

DATA SET SYMB.	CONFIGURATION DESCRIPTION	ELEVON	AILRON	BOFLAP	SPDRK	REFERENCE INFORMATION
(TEJ010)	ARC 11-747 OAS3A B C M F VI	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(TEJ050)	ARC 11-747 OAS3A B C M F VI	.000	.000	16.300	25.000	LREF 14.2440 IN.
(TEJ008)	ARC 11-747 OAS3A B C M F VI	.000	.000	16.300	25.000	BREF 28.1004 IN.
(TEJ049)	ARC 11-747 OAS3A B C M F VI	.000	.000	16.300	25.000	XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP .0000 IN.
						SCALE 11.2500 IN.
						SCALE .0300 IN.

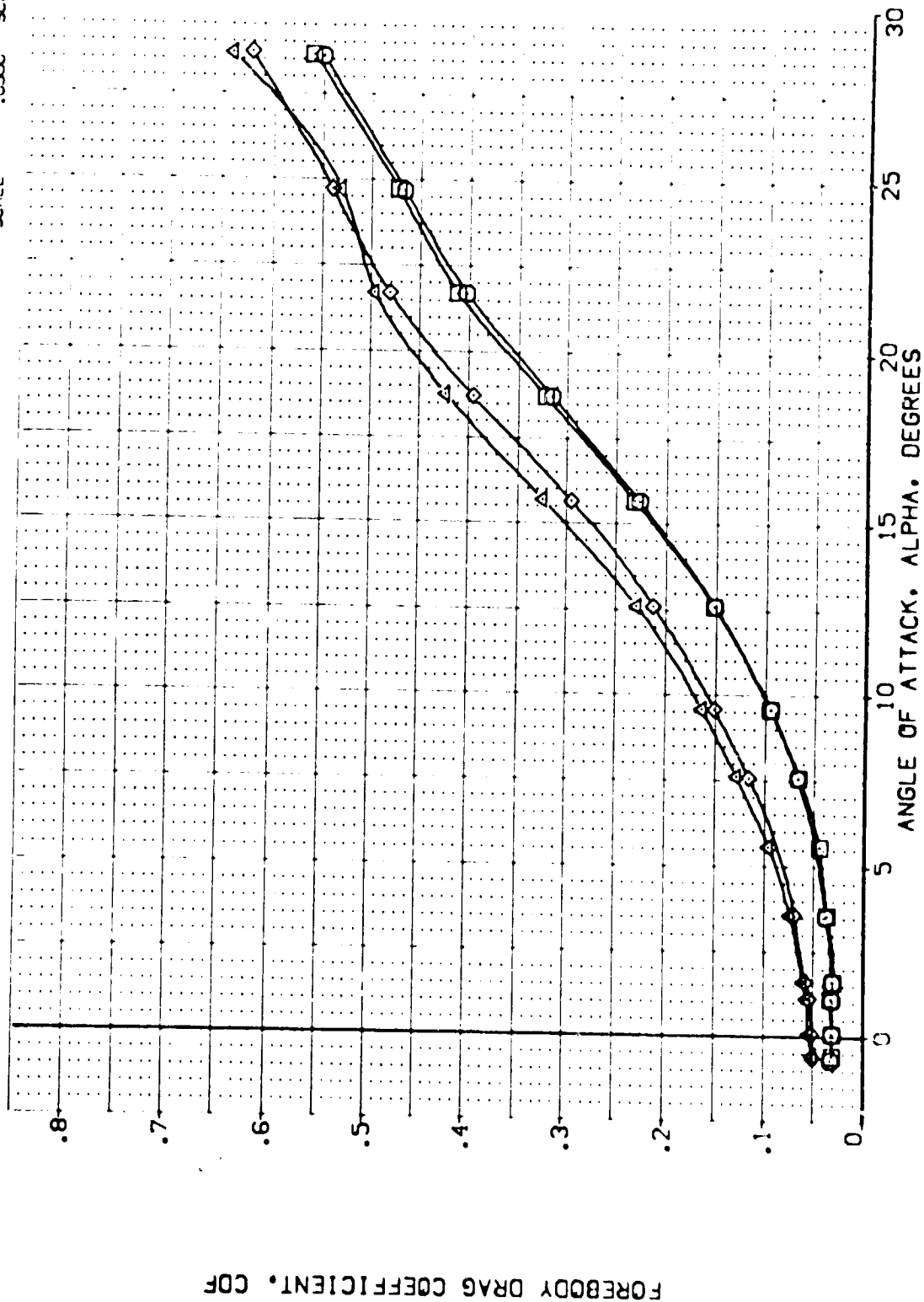


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(B)MACH .80





DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NON	RV/L	SEAL.EL	ELEVON	AIRLON	BOFLAP	SPDBRK	REFERENCE INFORMATION
(TEJ010)	ARC 11-747 D-53A B C M F V	V	NON	RV/L	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(TEJ050)	ARC 11-747 D-53A B C M F V	V	NON	RV/L	.000	.000	16.300	25.000	LREF 14.2410
(TEJ008)	ARC 11-747 D-53A B C M F V	V	NON	RV/L	.000	.000	16.300	25.000	BREF 28.1004
(TEJ049)	ARC 11-747 D-53A B C M F V	V	NON	RV/L	.000	.000	16.300	25.000	XREF 32.3010
									YREF .0000
									ZREF .0000
									SCALE 11.7500
									SCALE .0300

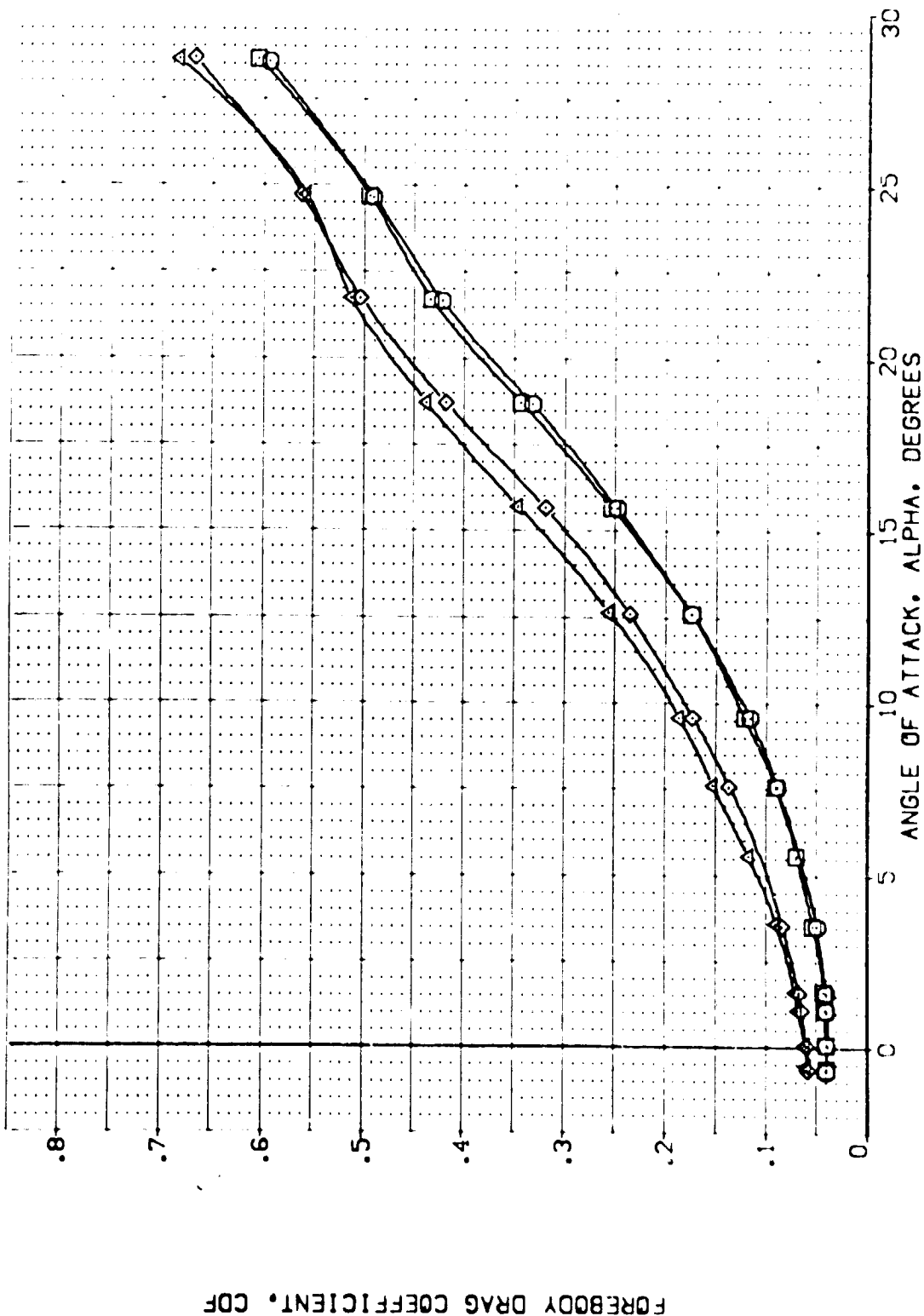


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(C)MACH = .90

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	Y	NOM.	RU/L	SEAL.EL	ELEVON	AIRLON	BDF LAP	SPOOR	REFERENCE INFORMATION
(TEJ010)	Q	ARC 11-747 D453A B C M F V	V	NOM.	RU/L	SEAL.EL	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(TEJ050)	Q	ARC 11-747 D453A B C M F V	V	NOM.	RU/L	SEAL.EL	.000	.000	16.300	25.000	LRPF 14.2140
(TEJ008)	Q	ARC 11-747 D453A B C M F V	V	NOM.	RU/L	SEAL.EL	.000	.000	16.300	25.000	BRPF 28.1004
(TEJ049)	Q	ARC 11-747 D453A B C M F V	V	NOM.	RU/L	SEAL.EL	.000	.000	16.300	25.000	XRPF 32.3010
											YMRP .0000
											ZMRP 11.2500
											SCALE 10.300

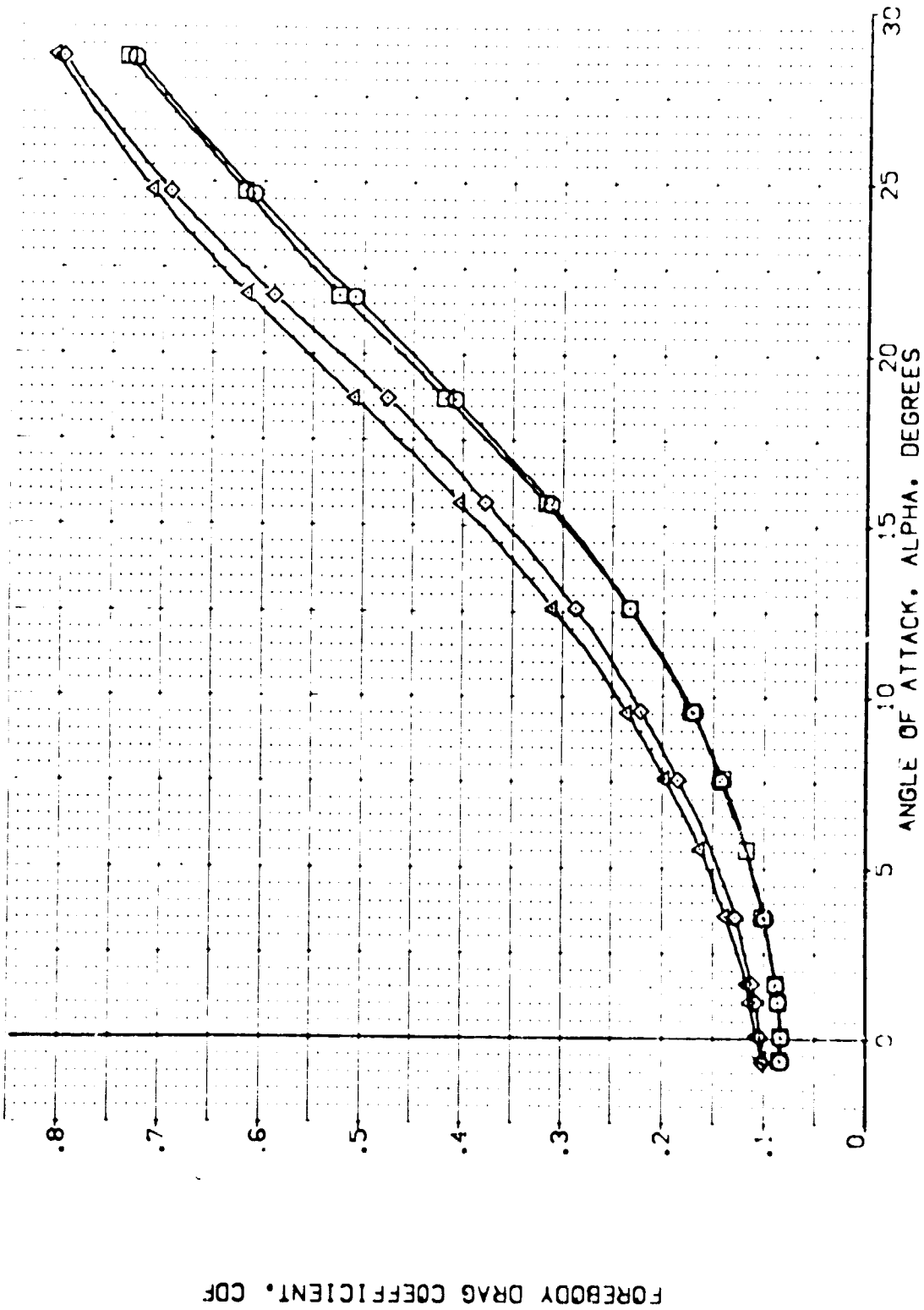


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(Q)MACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NO.	RV/L	SEAL. EL	ELEVON	AIRLON	BOFLAP	SPOBRK	REFERENCE INFORMATION
(1EJ010)	ARC 11-747 GAS3A B C M F VI V	NON	RV/L	SEAL. EL	.000	.000	16.300	25.000	SREF 2.4210 SQ. FT.
(1EJ050)	ARC 11-747 GAS3A B C M F VI V	NON	RV/L	SEAL. EL	.000	.000	16.300	25.000	LREF 14.2440
(1EJ078)	ARC 11-747 GAS3A B C M F VI V	NON	RV/L	SEAL. EL	.000	.000	16.300	25.000	BREF 28.1000
(1EJ049)	ARC 11-747 GAS3A B C M F VI V	NON	RV/L	SEAL. EL	.000	.000	16.300	25.000	XMRP 32.3010
									YMRP .0000
									ZMRP 11.2500
									SCALE 11.0300

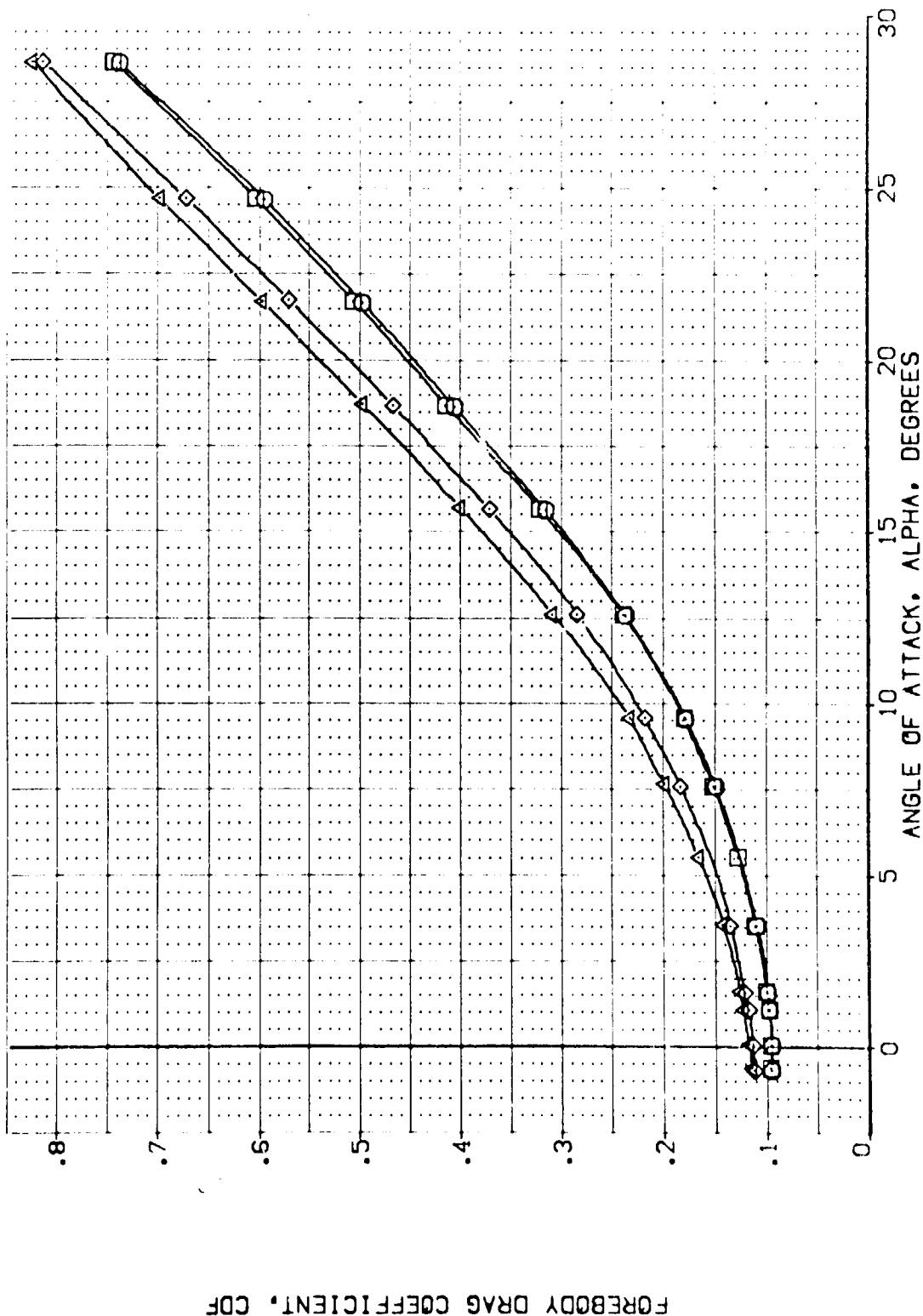


FIG. 10 SEALED ELEVON SPLIT EFFECTS

CEJMACH = 1.20



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NOI	RV/L	SEAL.EL	ELEVON	AILRON	BOFLAP	SPDRK	REFERENCE INFORMATION
[TEJ010]	ARC 11-747 DASSA B C H F VI V	NOI	RV/L	SEAL.EL	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
[TEJ050]	ARC 11-747 DASSA B C H F VI V	NOI	RV/L	SEAL.EL	.000	.000	16.300	25.000	LREF 14.2440 IN.
[TEJ008]	ARC 11-747 DASSA B C H F VI V	NOI	RV/L	SEAL.EL	15.000	.000	16.300	25.000	BREF 28.1004 IN.
[TEJ049]	ARC 11-747 DASSA B C H F VI V	NOI	RV/L	SEAL.EL	15.000	.000	16.300	25.000	XMRP 32.3010 IN.
									YMRP .0000 IN.
									ZMRP 11.2500 IN.
									SCALE .0300

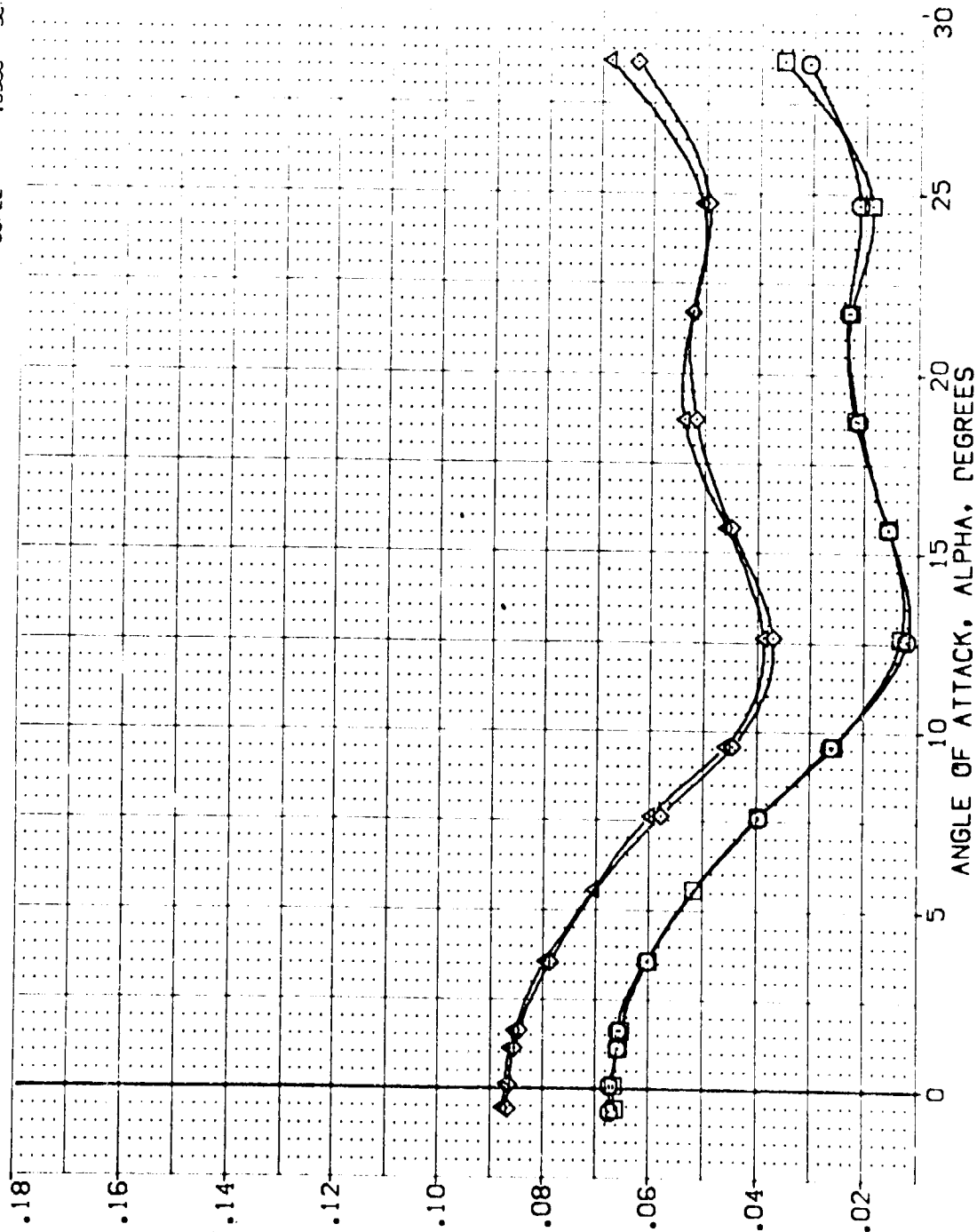


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(A)MACH = .60



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NO.	RM/L	SEAL. EL	ELEVON	AIRLON	BOF LAP	SPDRBK	REFERENCE INFORMATION
[TEJ010]	ARC 11-747 DA53A B C M F V1 V	NO.	RM/L	SEAL. EL	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
[TEJ050]	ARC 11-747 DA53A B C M F V1 V	NO.	RM/L	SEAL. EL	.000	.000	16.300	25.000	LPREF 14.2440
[TEJ008]	ARC 11-747 DA53A B C M F V1 V	NO.	RM/L	SEAL. EL	15.000	.000	16.300	25.000	BPREF 28.0000
[TEJ049]	ARC 11-747 DA53A B C M F V1 V	NO.	RM/L	SEAL. EL	15.000	.000	16.300	25.000	AVREF 32.0000
									VMREF 11.0000
									VMREF 11.0000
									SCALE 1.0300

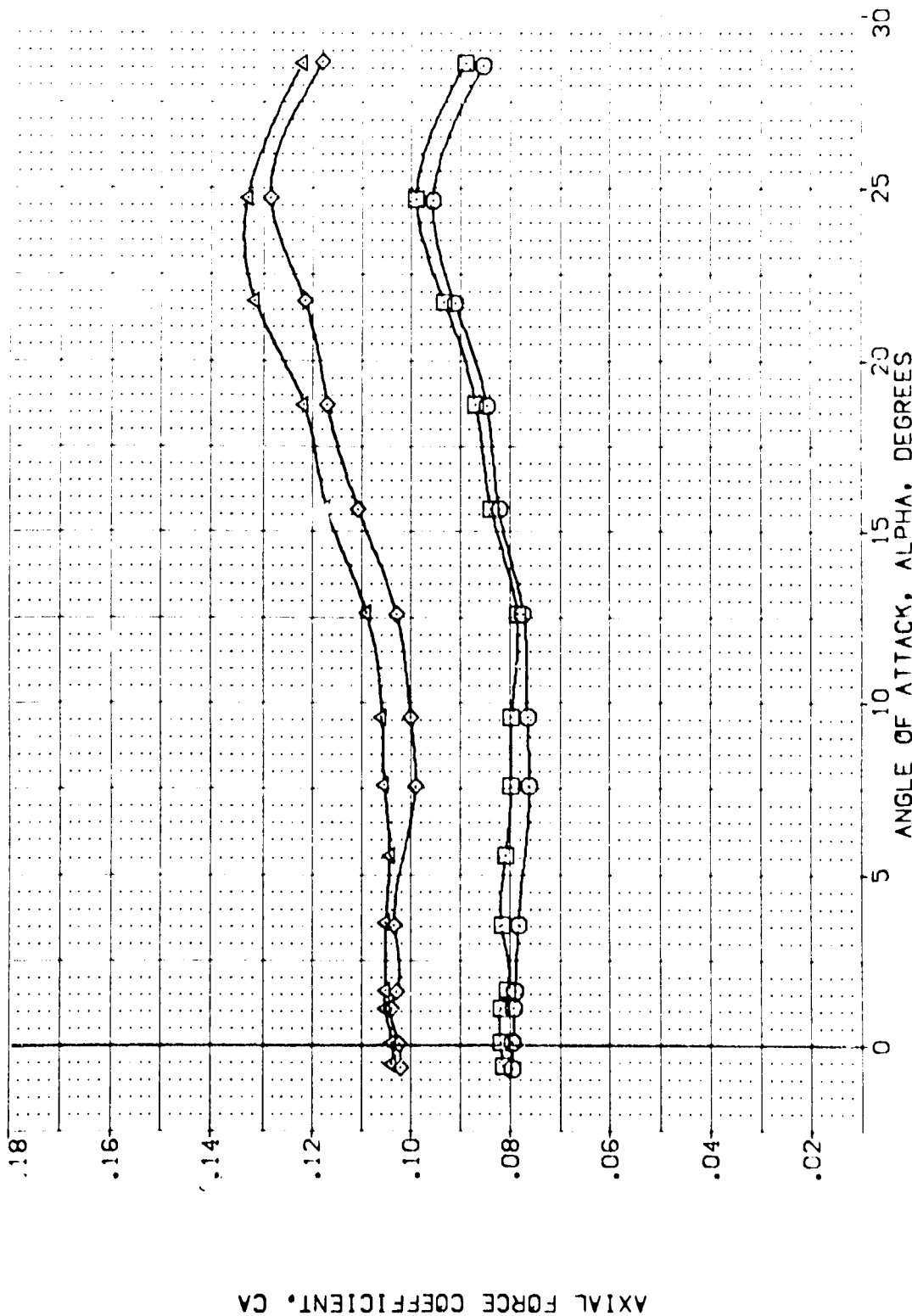


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(C)MACH = .90



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NOI.	RV/L	SEAL.EL	ELEVON	AILLRON	BOFLAP	SPDRBK	REFERENCE INFORMATION
(TEJ010)	ARC 11-747 DAS3A B C M F VI	V	NOT.	RV/L	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(TEJ050)	ARC 11-747 DAS3A B C M F VI	V	NOT.	RV/L	.000	.000	16.300	25.000	LREF 14.2440
(TEJ008)	ARC 11-747 DAS3A B C M F VI	V	NOT.	RV/L	.000	.000	16.300	25.000	BREF 28.1004
(TEJ049)	ARC 11-747 DAS3A B C M F VI	V	NOT.	RV/L	.000	.000	16.300	25.000	YMRP 32.3010
									ZMRP .0000
									SCALE 11.2500
									SCALE .0300

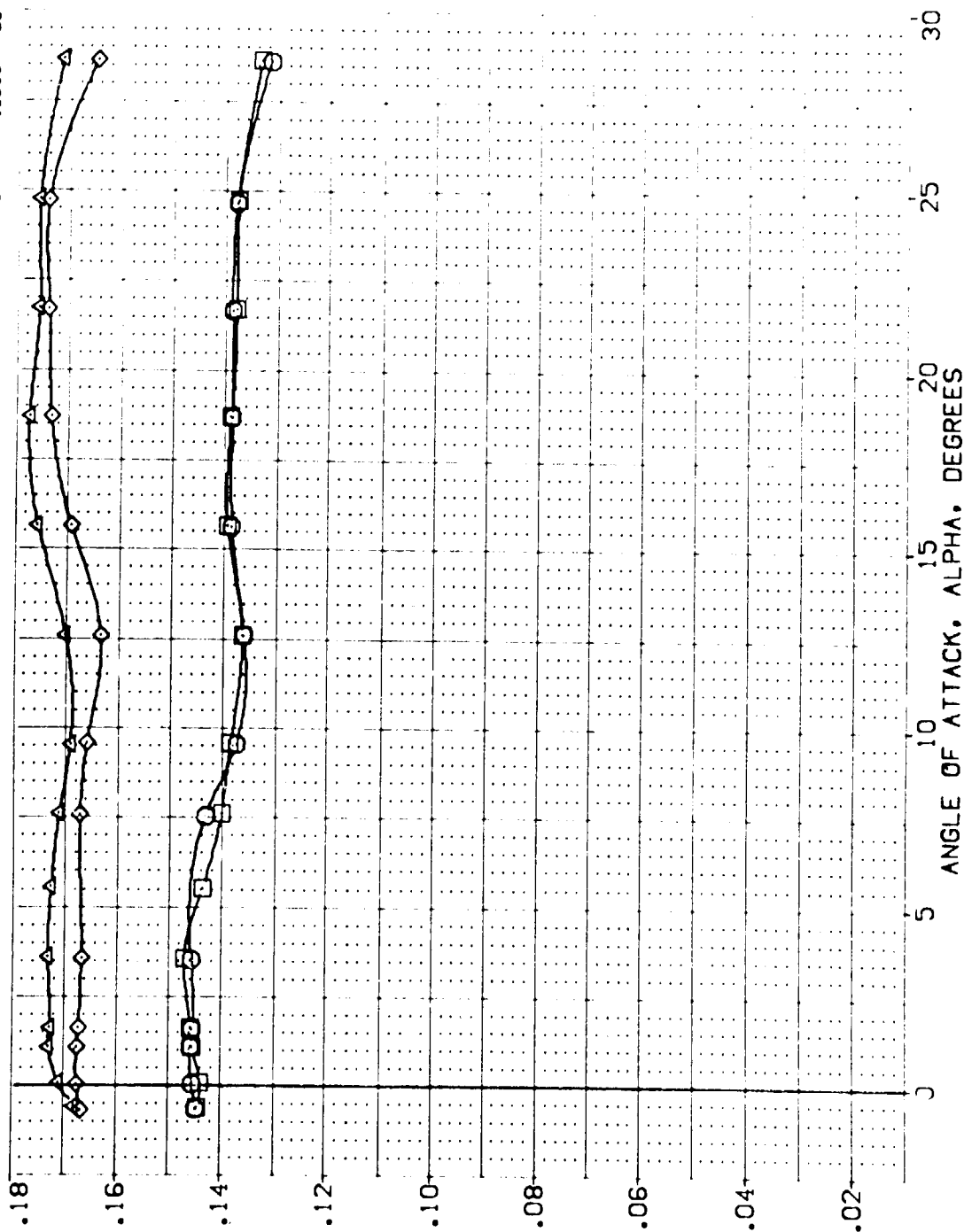
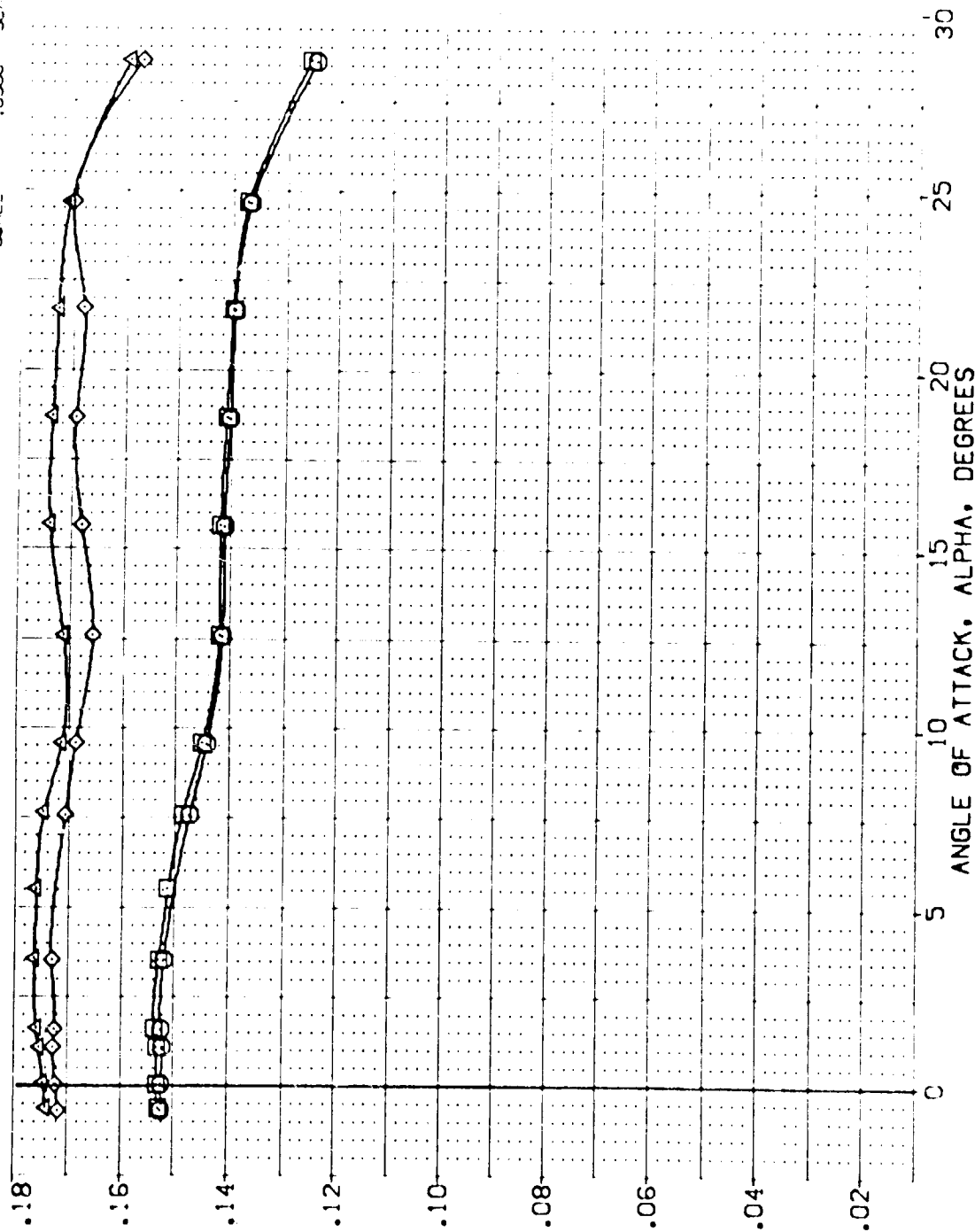


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(O)MACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NON.	RV/L	SEAL,EL	ELEVON	AIRLON	BOFLAP	SPOBRK	REFERENCE INFORMATION
[TEJ010]	ARC 11-747 DA53A B C M F V1	V			.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
[TEJ050]	ARC 11-747 DA53A B C M F V1	V			.000	.000	16.300	25.000	LREF 14.2440
[TEJ008]	ARC 11-747 DA53A B C M F V1	V			.000	.000	16.300	25.000	BREF 28.1000
[TEJ049]	ARC 11-747 DA53A B C M F V1	V			15.000	.000	16.300	25.000	YMRP 32.3010
									ZMRP 11.7500
									SCALE 10300



AXIAL FORCE COEFFICIENT, CA

FIG. 10 SEALED ELEVON SPLIT EFFECTS

(E)MACH = 1.20





DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPDRBK	REFERENCE INFORMATION
(TEJ010)	ARC 11-747 DA53A B C M F VI V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(TEJ050)	ARC 11-747 DA53A B C M F VI V	.000	.000	16.300	25.000	LREF 14.2440
(TEJ008)	ARC 11-747 DA53A B C M F VI V	15.000	.000	16.300	25.000	BREF 28.1004
(TEJ049)	ARC 11-747 DA53A B C M F VI V	15.000	.000	16.300	25.000	XMRP 32.3010
						YMRP .0000
						ZMRP 11.2300
						SCALE .0300

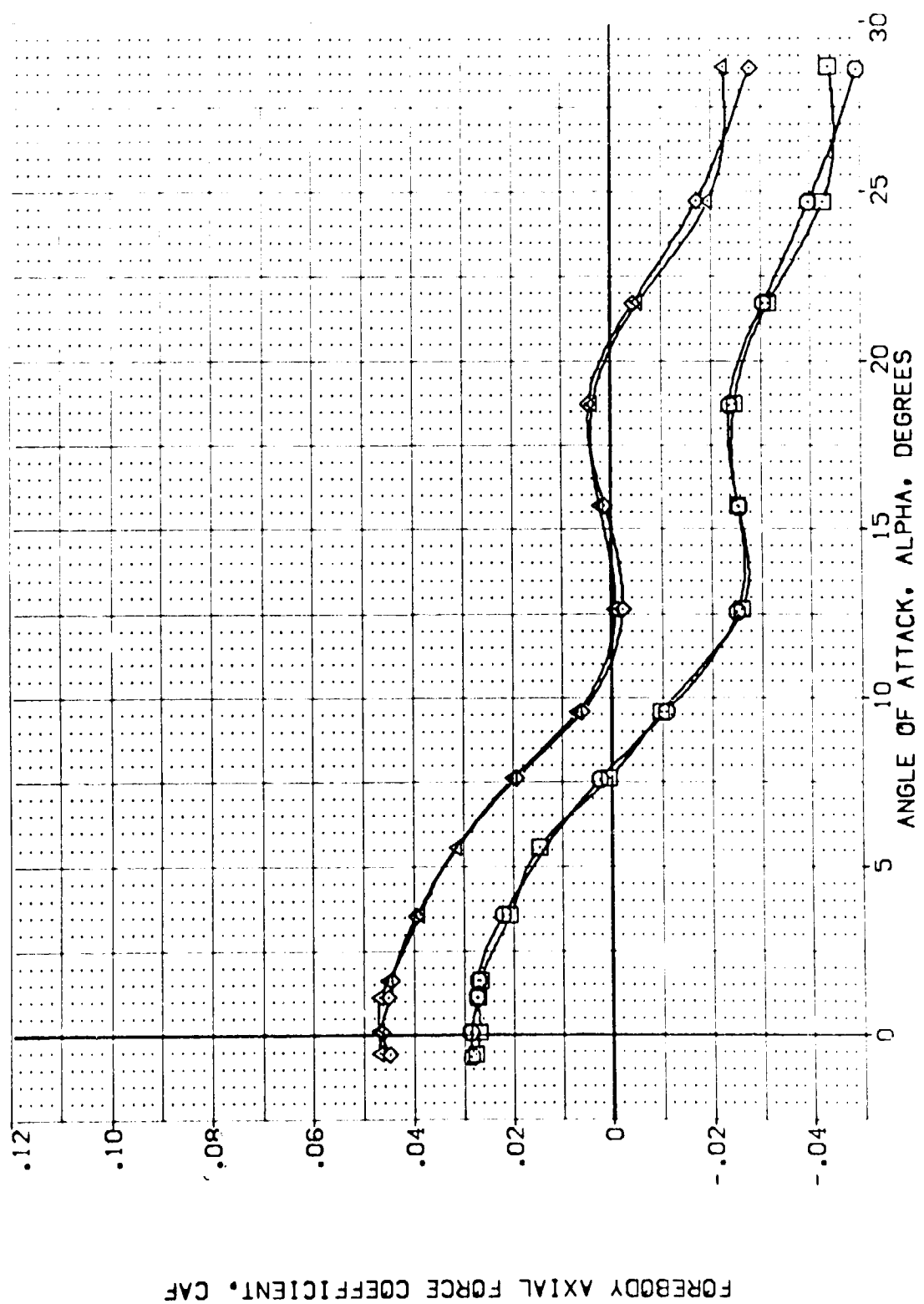
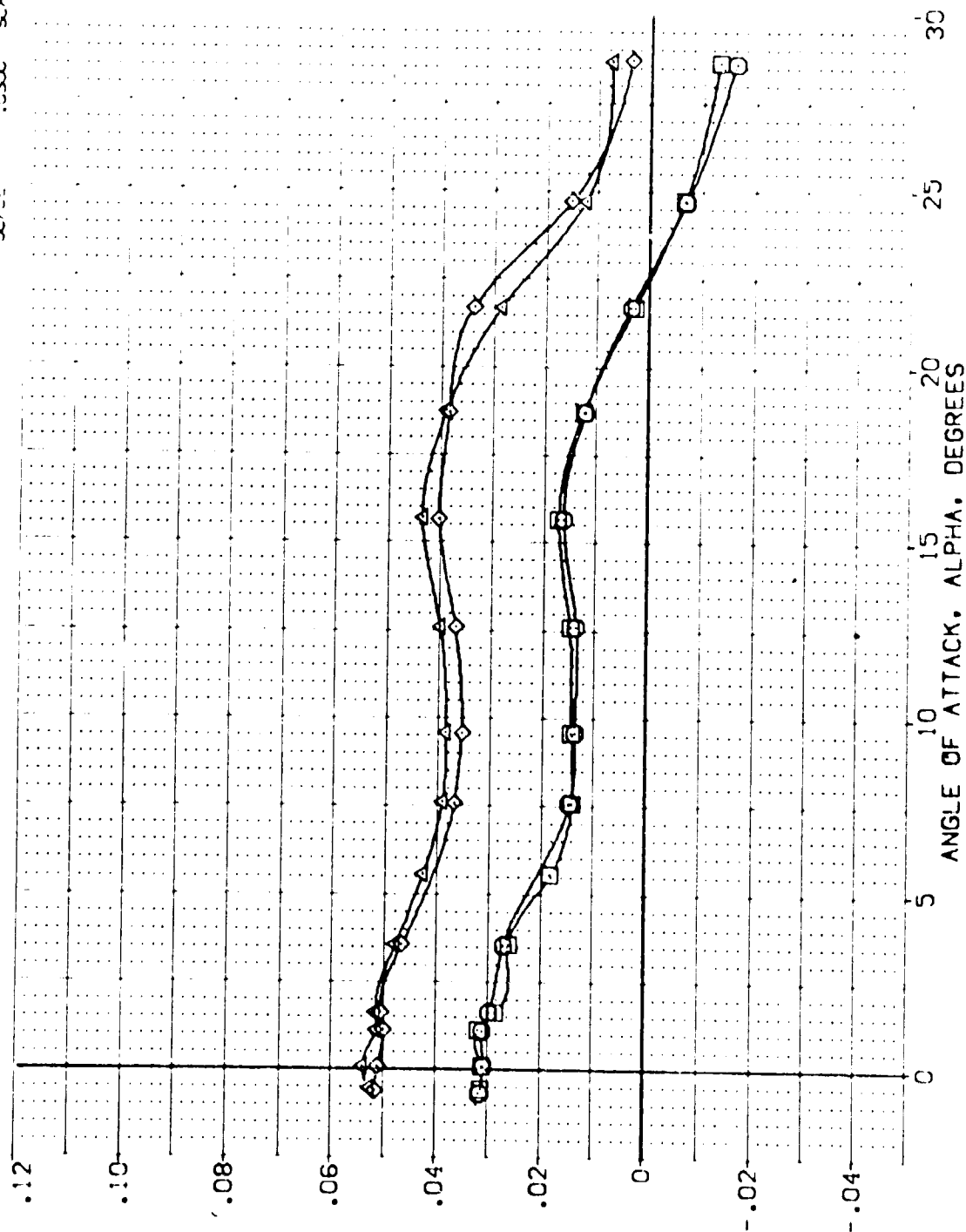


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(A)MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NOM.	RV/L	SEAL, EL	ELEVON	AILERON	BOG LAP	SPD BRK	REFERENCE INFORMATION
[1EJ010]	ARC 11-747 DA53A B C M F VI V	NOM.	RV/L	SEAL, EL	.000	.000	15.300	25.000	SPREF 2.4210 SQ.FT.
[1EJ050]	ARC 11-747 DA53A B C M F VI V	NOM.	RV/L	SEAL, EL	.000	.000	15.300	25.000	SPREF 14.2440
[1EJ008]	ARC 11-747 DA53A B C M F VI V	NOM.	RV/L	SEAL, EL	15.000	.000	15.300	25.000	BPREF 28.1004
[1EJ049]	ARC 11-747 DA53A B C M F VI V	NOM.	RV/L	SEAL, EL	15.000	.000	15.300	25.000	APREF 32.3010
									YREF 11.2000
									ZREF 11.2000
									SCALE 11.0300



FOREBODY AXIAL FORCE COEFFICIENT, CAF

FIG. 10 SEALED ELEVON SPLIT EFFECTS

(B) MACH = .80

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(TEJ010) Q ARC 11-747 CASSA B C M F VI V

(TEJ050) Q ARC 11-747 CASSA B C M F VI V

(TEJ080) Q ARC 11-747 CASSA B C M F VI V

(TEJ090) Q ARC 11-747 CASSA B C M F VI V

NON: RV/L SEAL:EL

NON: RV/L SEAL:EL

NON: RV/L SEAL:EL

NON: RV/L SEAL:EL

ELEVON .000

ELEVON .000

ELEVON .000

ELEVON .000

AILERON .000

AILERON .000

AILERON .000

AILERON .000

BOFLAP 16.300

BOFLAP 16.300

BOFLAP 16.300

BOFLAP 16.300

SPDRBK 25.000

SPDRBK 25.000

SPDRBK 25.000

SPDRBK 25.000

REFERENCE INFORMATION:

SREF 2.4210 SQ.FT.

BREF 14.2440

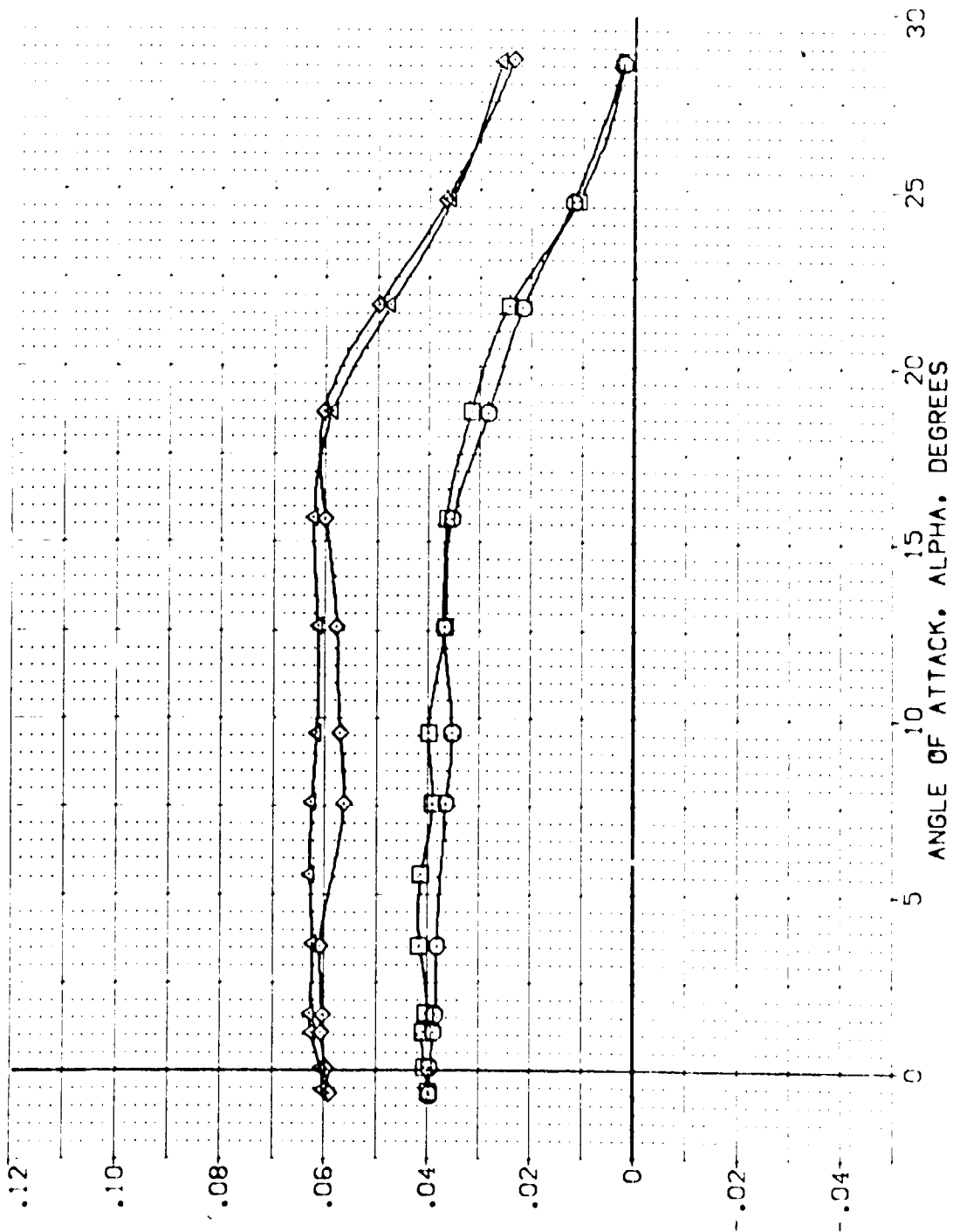
SREF 28.1004

YREF 32.3010

ZREF .0000

ZREF 11.2500

SCALE .0300



FOREBODY AXIAL FORCE COEFFICIENT, CAF

FIG. 10 SEALED ELEVON SPLIT EFFECTS

(COMACH = .90



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NON-REF	SEAL-EL	ELEVON	AIRLON	BOFLAP	SPOBRK	REFERENCE INFORMATION
(TEJ010)	ARC 11-747 DA53A B C H F V	V		.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(TEJ050)	ARC 11-747 DA53A B C H F V	V		.000	.000	16.300	25.000	LREF 14.2440
(TEJ008)	ARC 11-747 DA53A B C H F V	V		.000	.000	16.300	25.000	BREF 28.1004
(TEJ049)	ARC 11-747 DA53A B C H F V	V		.000	.000	16.300	25.000	XMRP 32.3010
								YMRP .0000
								ZMRP 11.2500
								SCALE .5300

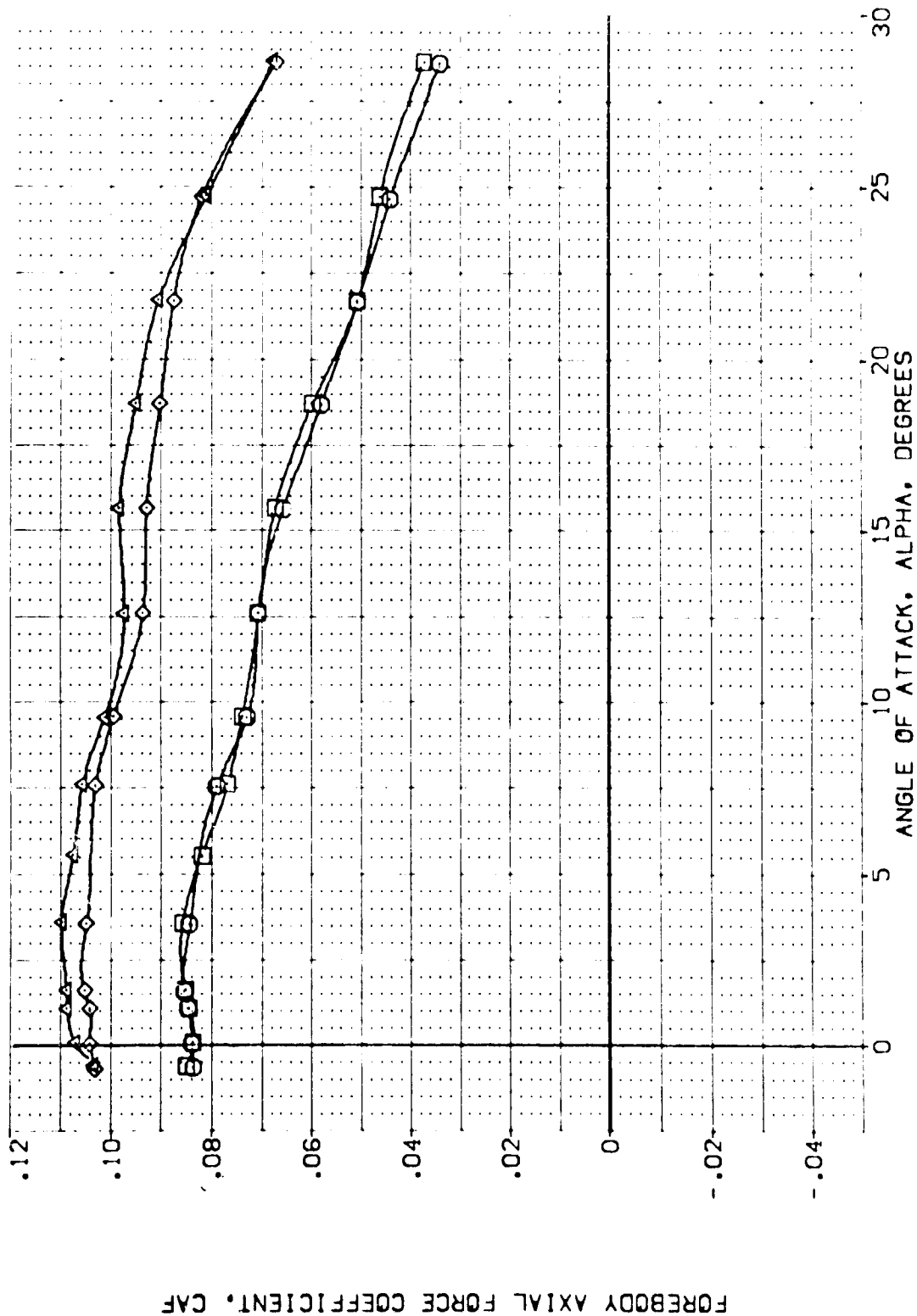


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(M)MACH = 1.05

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	NOM.	RV/L	SEAL, EL	ELEVON	AIRLON	BOF LAP	SPOBRK	REFERENCE INFORMATION
(TEJ010)	Q	ARC 11-747 DA53A B C M F VI V	NOM.	RV/L	SEAL, EL	.000	.000	16.300	25.000	SREF 2.4210 SQ. FT.
(TEJ050)	Q	ARC 11-747 DA53A B C M F VI V	NOM.	RV/L	SEAL, EL	.000	.000	16.300	25.000	LREF 14.2440
(TEJ008)	Q	ARC 11-747 DA53A B C M F VI V	NOM.	RV/L	SEAL, EL	.000	.000	16.300	25.000	BREF 28.1004
(TEJ019)	Q	ARC 11-747 DA53A B C M F VI V	NOM.	RV/L	SEAL, EL	.000	.000	16.300	25.000	XREF 32.3010
										YREF 32.3000
										ZREF 11.2500
										SCALE 1.0300

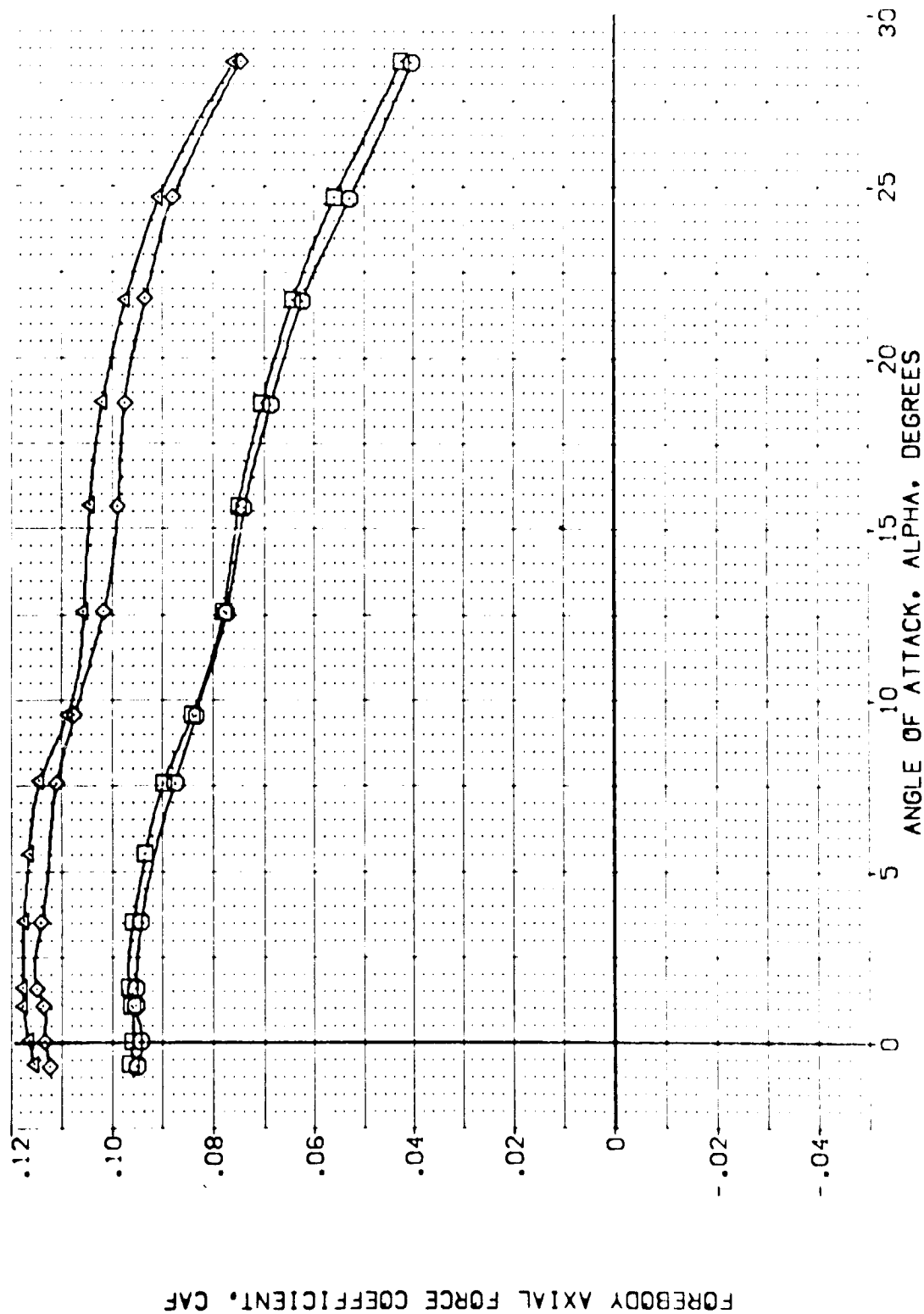


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(E)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NON.	RN/L	SEAL.EL	ELEVON	AILERON	BOFLAP	SPDBRK	REFERENCE INFORMATION
(TEJ010)	ARC 11-747 CASSA B C H F VI V	NON.	RN/L	SEAL.EL	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(TEJ050)	ARC 11-747 CASSA B C H F VI V	NON.	RN/L	SEAL.EL	.000	.000	16.300	25.000	LREF 14.2440
(TEJ008)	ARC 11-747 CASSA B C H F VI V	NON.	RN/L	SEAL.EL	.000	.000	16.300	25.000	BREF 28.1004
(TEJ049)	ARC 11-747 CASSA B C H F VI V	NON.	RN/L	SEAL.EL	.000	.000	16.300	25.000	YREF 37.3010
									YREF 11.3000
									SCALE 11.3000

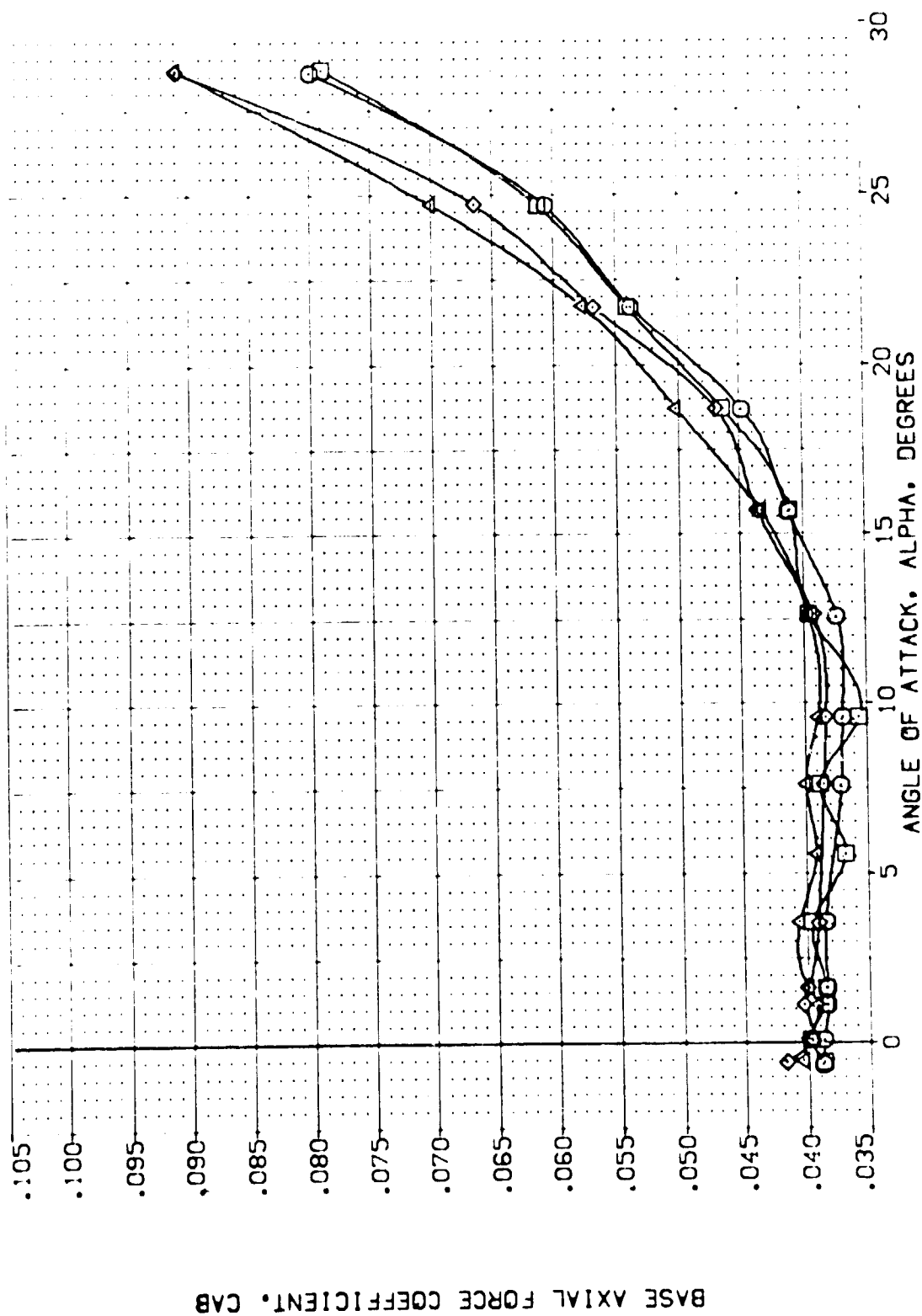


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(A)MAC = .60

DATA SET SYMBOL CONFIGURATION DESCRIPTION

[TEJ010]	Q	ARC 11-747	0A53A	B	C	M	F	V	V
[TEJ050]		ARC 11-747	0A53A	B	C	M	F	V	V
[TEJ008]	X	ARC 11-747	0A53A	B	C	M	F	V	V
[TEJ019]		ARC 11-747	0A53A	B	C	M	F	V	V

ELEVON AILRON BOFLAP SPLBARK

.000	.000	16.300	25.000
.000	.000	16.300	25.000
15.000	.000	16.300	25.000
15.000	.000	16.300	25.000

REFERENCE INFORMATION

SREF	2.4210	SO.FT.
LRFF	14.2440	N.
BRFF	28.1004	N.
YMRP	37.3010	N.
ZMRP	.0000	N.
SCALE	11.7500	SCALE
	.0300	

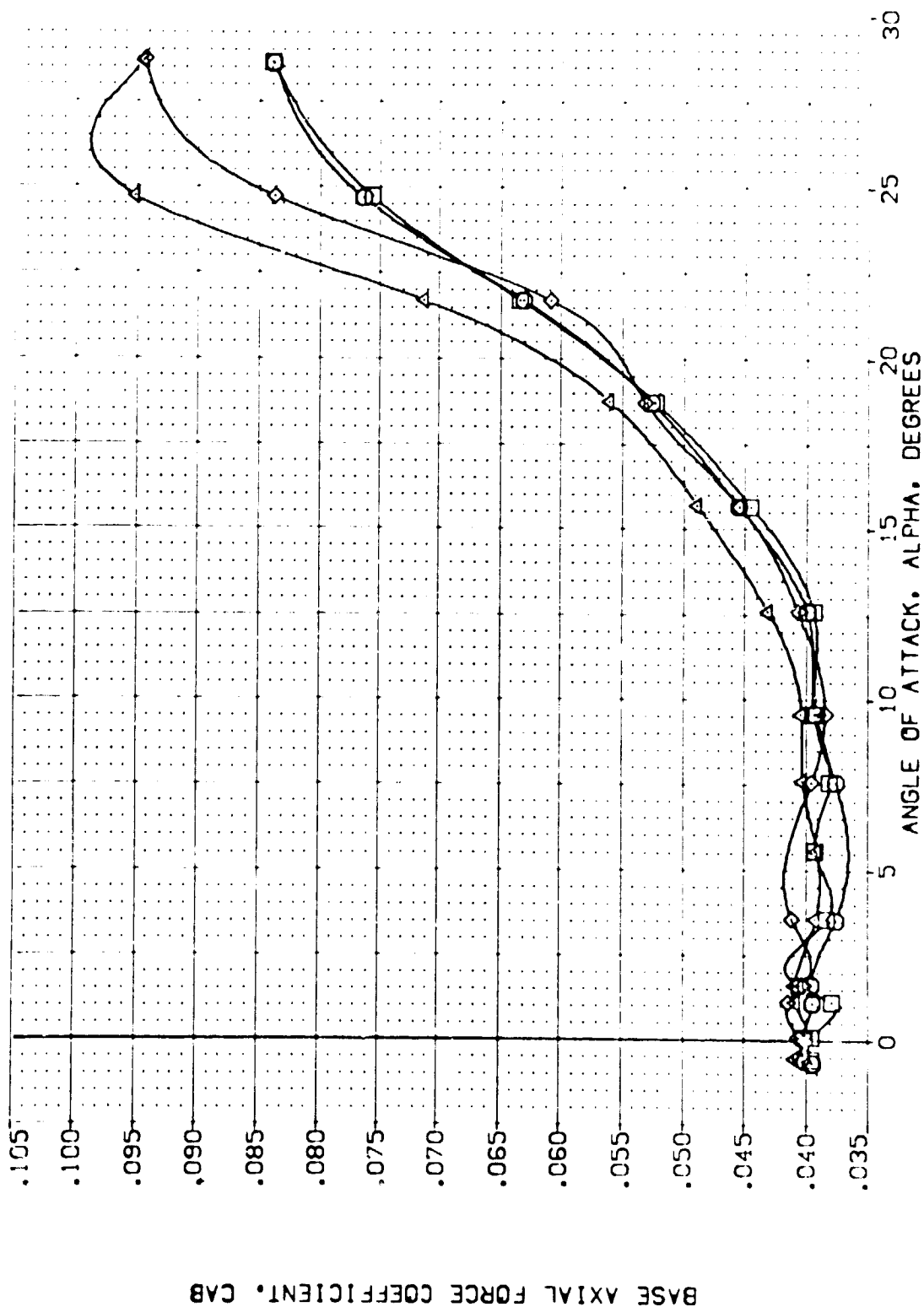


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(3) MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPDRBK	REFERENCE INFORMATION
(1EJ010)	ARC 11-747 BAS3A B C M F V1 V	NOM. RV/L	.000	16.300	25.000	SREF 2.4210 SCALE
(1EJ020)	ARC 11-747 BAS3A B C M F V1 V	NOM. RV/L	.000	16.300	25.000	LBREF 14.2440
(1EJ030)	ARC 11-747 BAS3A B C M F V1 V	NOM. RV/L	.000	16.300	25.000	BRREF 28.1000
(1EJ040)	ARC 11-747 BAS3A B C M F V1 V	NOM. RV/L	.000	16.300	25.000	YREF 37.3010
(1EJ050)	ARC 11-747 BAS3A B C M F V1 V	NOM. RV/L	.000	16.300	25.000	YREF 11.2500
						SCALE

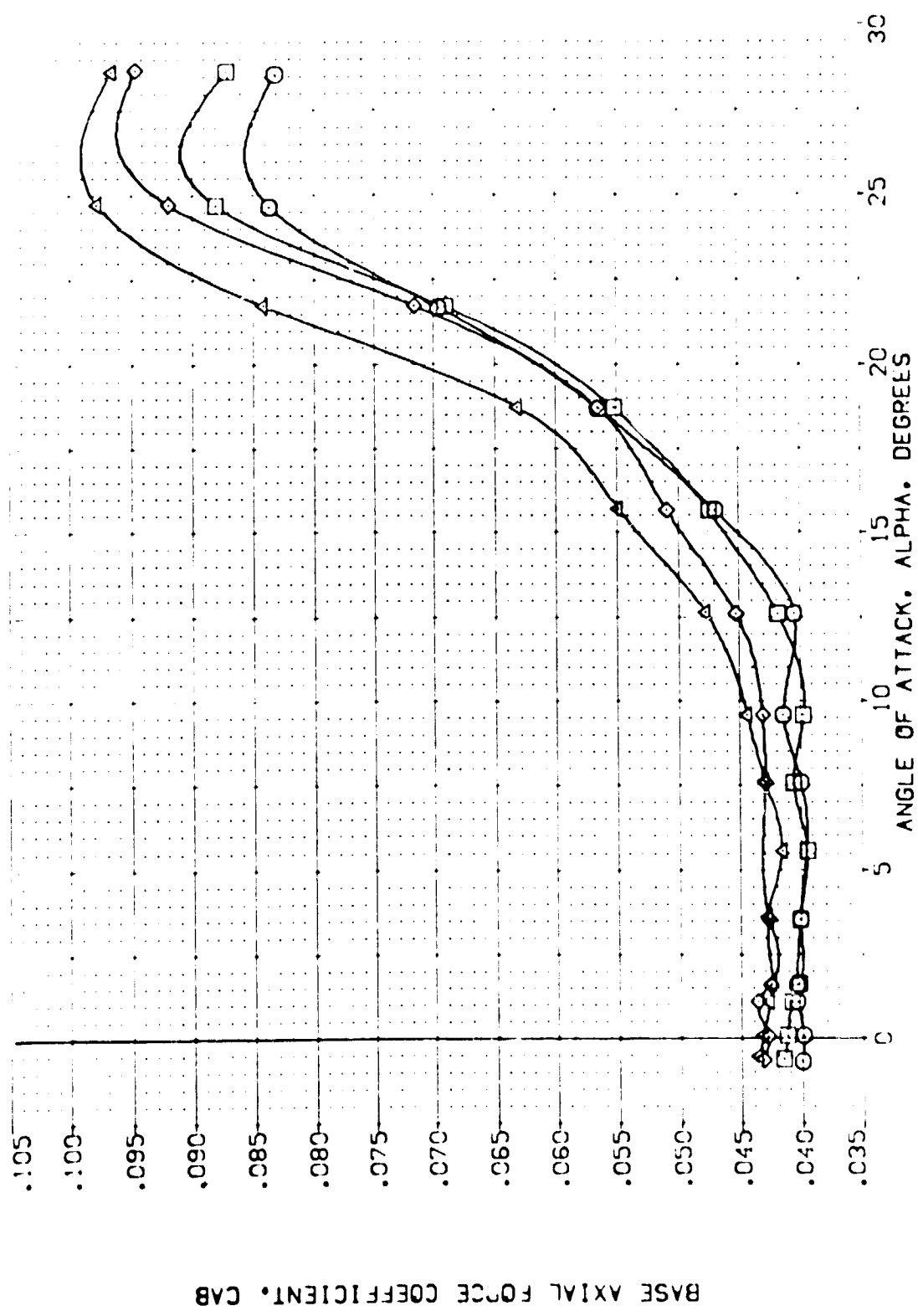


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(C)MAG-1 .90



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	BOFLAP	SPOBRK	REFERENCE INFORMATION
(TEJ0110)	ARC 11-747 DA53A B C M F V1 V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(TEJ050)	ARC 11-747 DA53A B C M F V1 V	.000	.000	16.300	25.000	LREF 14.2440 IN.
(TEJ008)	ARC 11-747 DA53A B C M F V1 V	.000	.000	16.300	25.000	BREF 78.1004 IN.
(TEJ019)	ARC 11-747 DA53A B C M F V1 V	.000	.000	16.300	25.000	XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP .0000 IN.
						SCALE 11.2500
						SCALE .0300

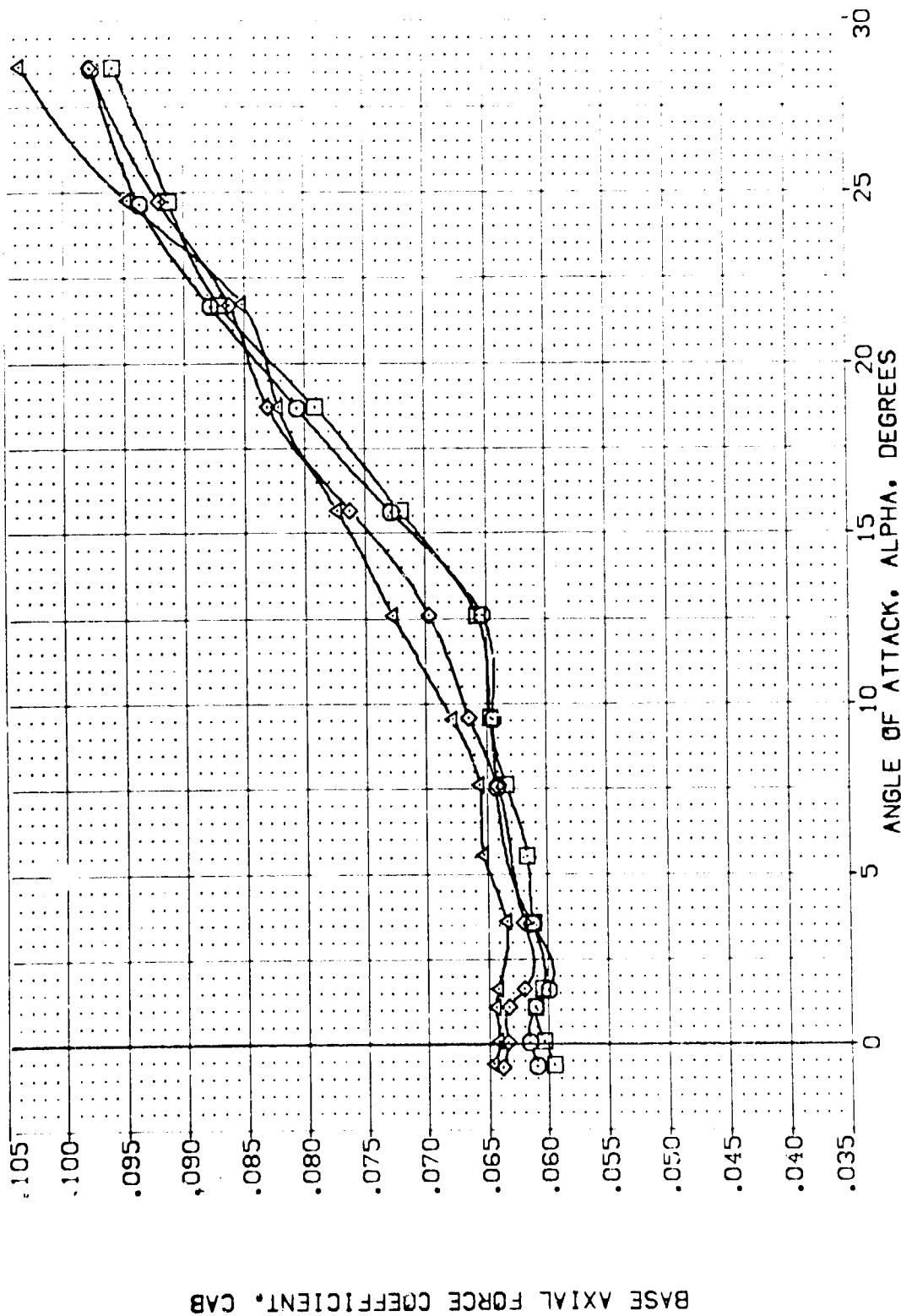


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(C)MACH = 1.05



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NOM.	RN/L	SEAL.EL	ELEVON	ATLORN	BOFLAP	SPOBARK	REFERENCE INFORMATION
(TEJ010)	ARC 11-747 DA53A B C M F V1 V	NOM.	RN/L	SEAL.EL	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(TEJ050)	ARC 11-747 DA53A B C M F V1 V	NOM.	RN/L	SEAL.EL	.000	.000	16.300	25.000	LRFF 14.2440 IN.
(TEJ008)	ARC 11-747 DA53A B C M F V1 V	NOM.	RN/L	SEAL.EL	.000	.000	16.300	25.000	BRFF 28.1004 IN.
(TEJ049)	ARC 11-747 DA53A B C M F V1 V	NOM.	RN/L	SEAL.EL	.000	.000	16.300	25.000	XMRP 32.3010 IN.
									YMRP .0000 IN.
									ZMRP 11.2500 IN.
									SCALE .0300

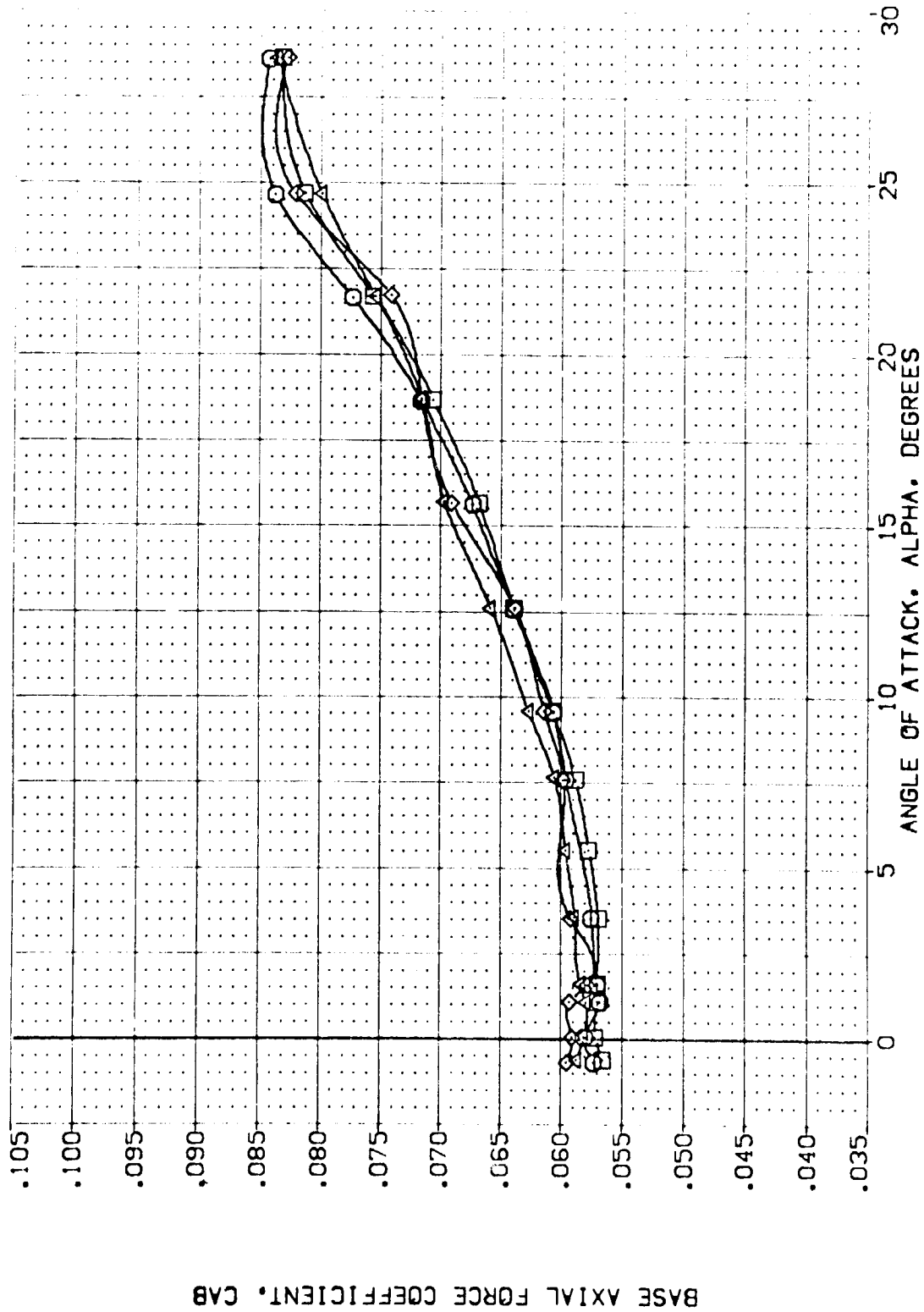


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(E)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AIRLON	BOFLAP	SPOBRK	REFERENCE INFORMATION
(TEJ010)	ARC 11-747 GAS3A B C M F VI V	.000	.000	16.300	25.000	SREF 2.4210 50. FT.
(TEJ050)	ARC 11-747 GAS3A B C M F VI V	.000	.000	16.300	25.000	LREF 14.2440 IN.
(TEJ008)	ARC 11-747 GAS3A B C M F VI V	15.000	.000	16.300	25.000	BREF 28.1004 IN.
(TEJ049)	ARC 11-747 GAS3A B C M F VI V	SEAL.EL	.000	16.300	25.000	XMREF 32.3010 IN.
		SEAL.EL	.000			YMREF .0000 IN.
						ZMREF 11.2500 IN.
						SCALE .0300

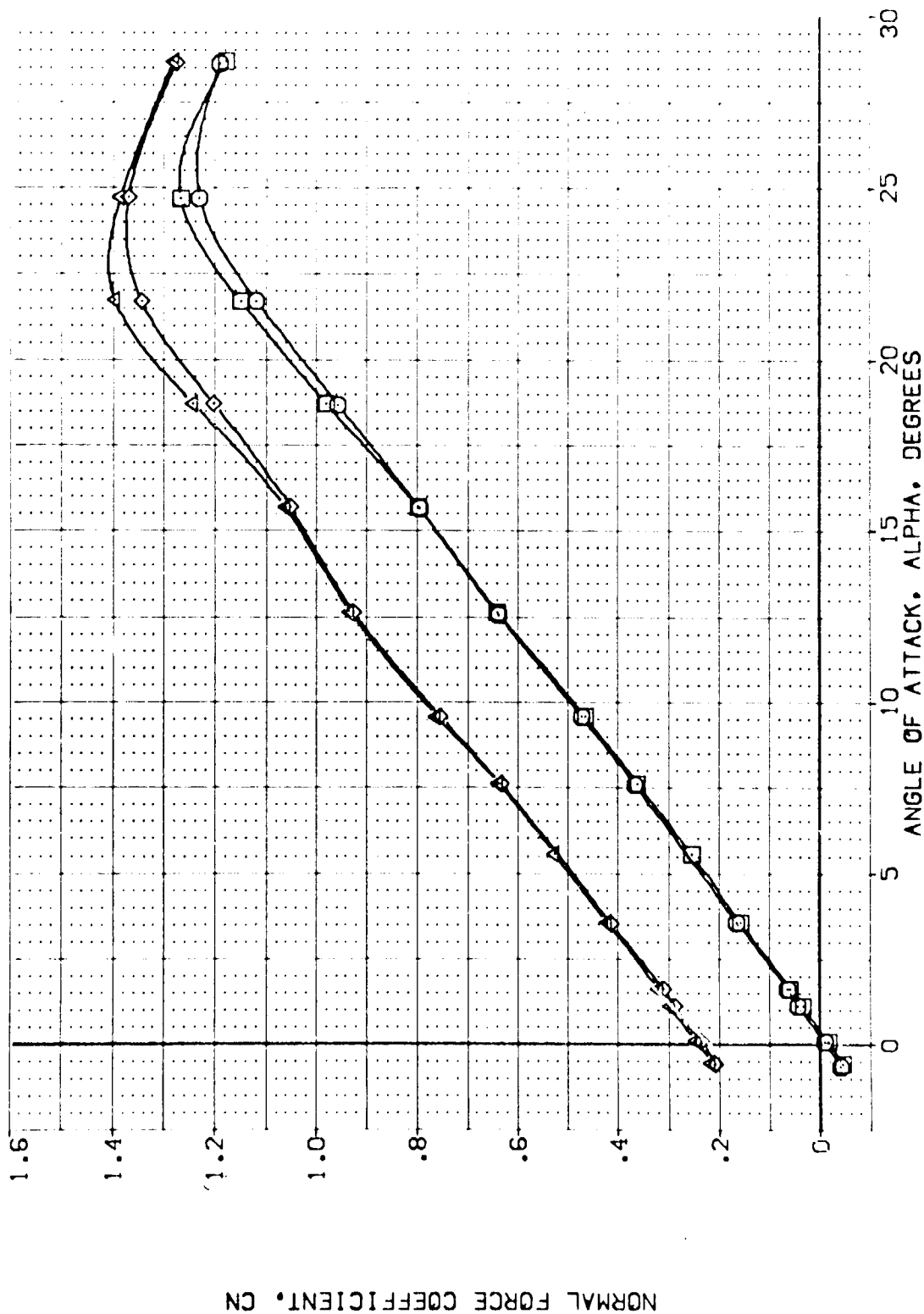


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(A) MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AIRLON	BDF LAP	SPDRBK	REFERENCE INFORMATION
(TEJ010)	ARC 11-747 DA53A B C M F V1 V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(TEJ050)	ARC 11-747 DA53A B C M F V1 V	.000	.000	16.300	25.000	LREF 14.2440 IN.
(TEJ008)	ARC 11-747 DA53A B C M F V1 V	.000	.000	16.300	25.000	BREF 28.1004 IN.
(TEJ049)	ARC 11-747 DA53A B C M F V1 V	.000	.000	16.300	25.000	XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

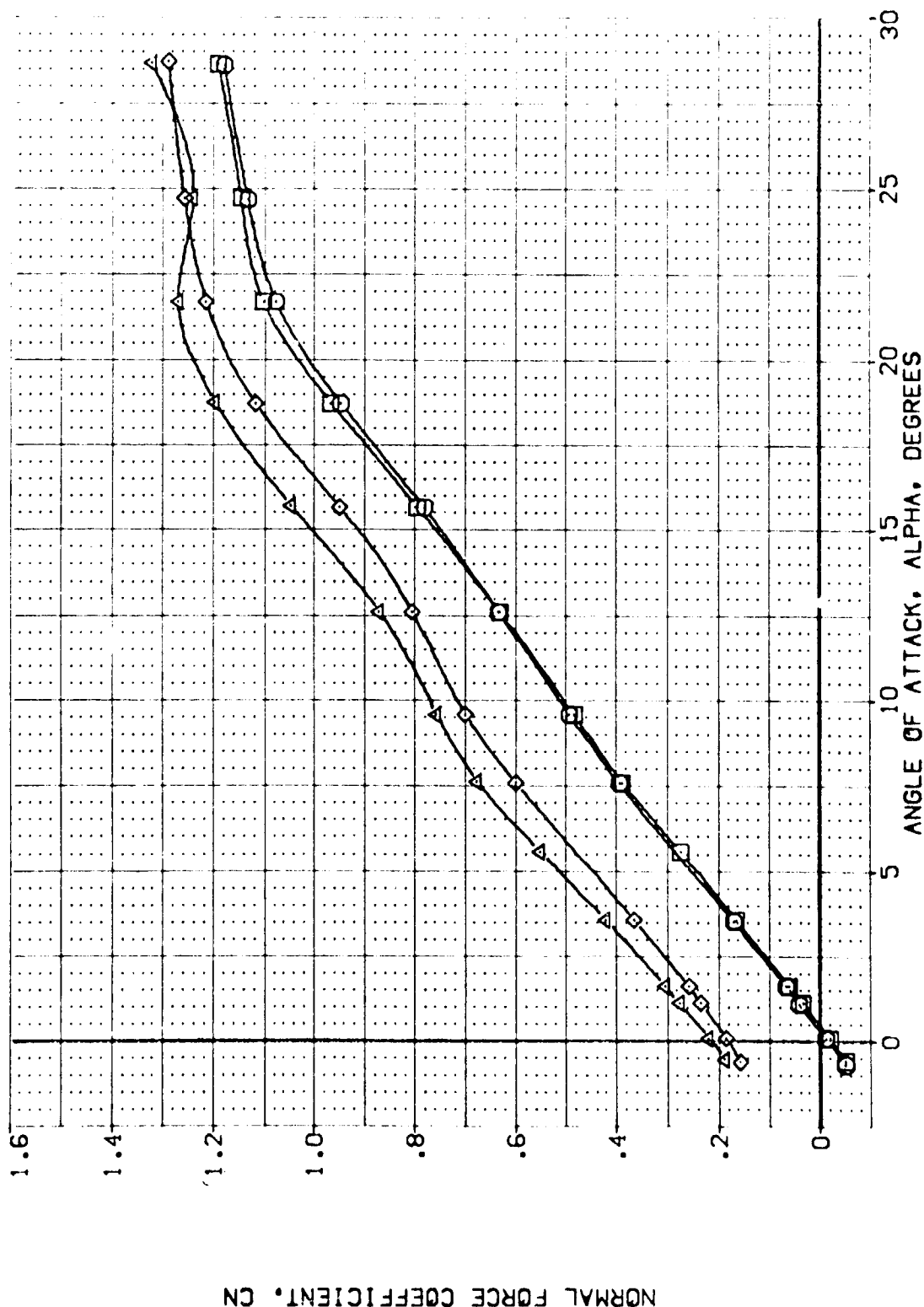


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(B)MACH = .80



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NOM. RV/L	SEAL.EL	ELEVON	ATTACH	BOFLAP	SPOBRK	REFERENCE INFORMATION
[TEJ010]	ARC 11-747 DA53A B C M F VI V	NOM. RV/L	SEAL.EL	.000	.000	15.300	25.000	SREF 2.4210 SQ.FT.
[TEJ050]	ARC 11-747 DA53A B C M F VI V	NOM. RV/L	SEAL.EL	.000	.000	15.300	25.000	LREF 14.2440
[TEJ008]	ARC 11-747 DA53A B C M F VI V	NOM. RV/L	SEAL.EL	.000	.000	15.300	25.000	BREF 28.1004
[TEJ049]	ARC 11-747 DA53A B C M F VI V	NOM. RV/L	SEAL.EL	.000	.000	15.300	25.000	XMRP 32.3010
								YMRP .0000
								ZMRP 11.7500
								SCALE .0300

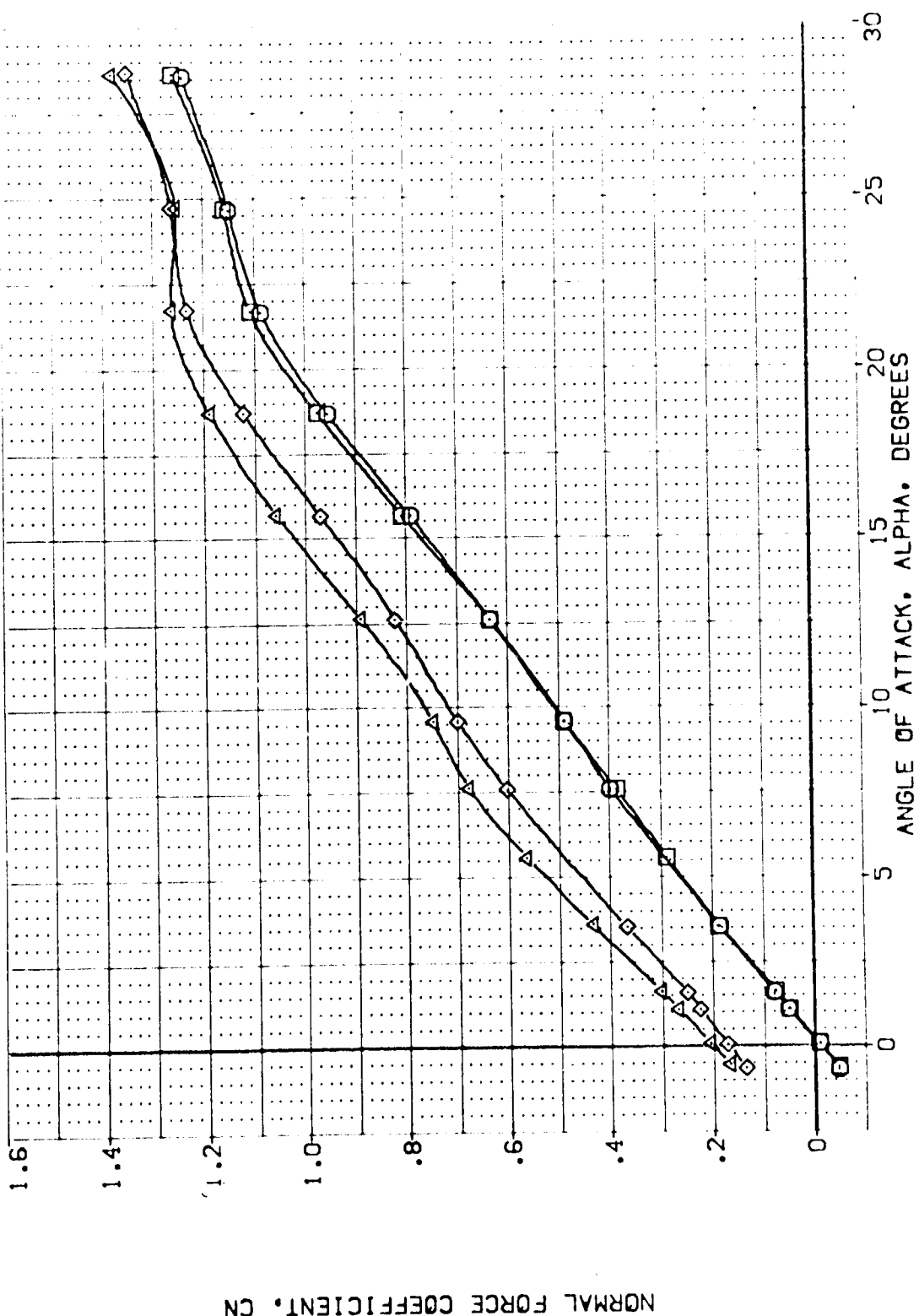


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(C)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NOM. RV/L	SEAL. EL	ELEVON	AIRLON	BOFLAP	SPOBRK	REFERENCE INFORMATION
(TEJ010)	ARC 11-747 DA53A B C M F V1 V	NOM. RV/L	SEAL. EL	.000	.000	16.300	25.000	SREF 2.4210 SQ. FT.
(TEJ050)	ARC 11-747 DA53A B C M F V1 V	NOM. RV/L	SEAL. EL	.000	.000	16.300	25.000	LREF 14.2440 IN.
(TEJ008)	ARC 11-747 DA53A B C M F V1 V	NOM. RV/L	SEAL. EL	15.000	.000	16.300	25.000	BREF 28.1002 IN.
(TEJ049)	ARC 11-747 DA53A B C M F V1 V	NOM. RV/L	SEAL. EL	15.000	.000	16.300	25.000	XMRP 32.3010 IN.
								YMRP .0000 IN.
								ZMRP 11.2500 IN.
								SCALE .0300 IN.

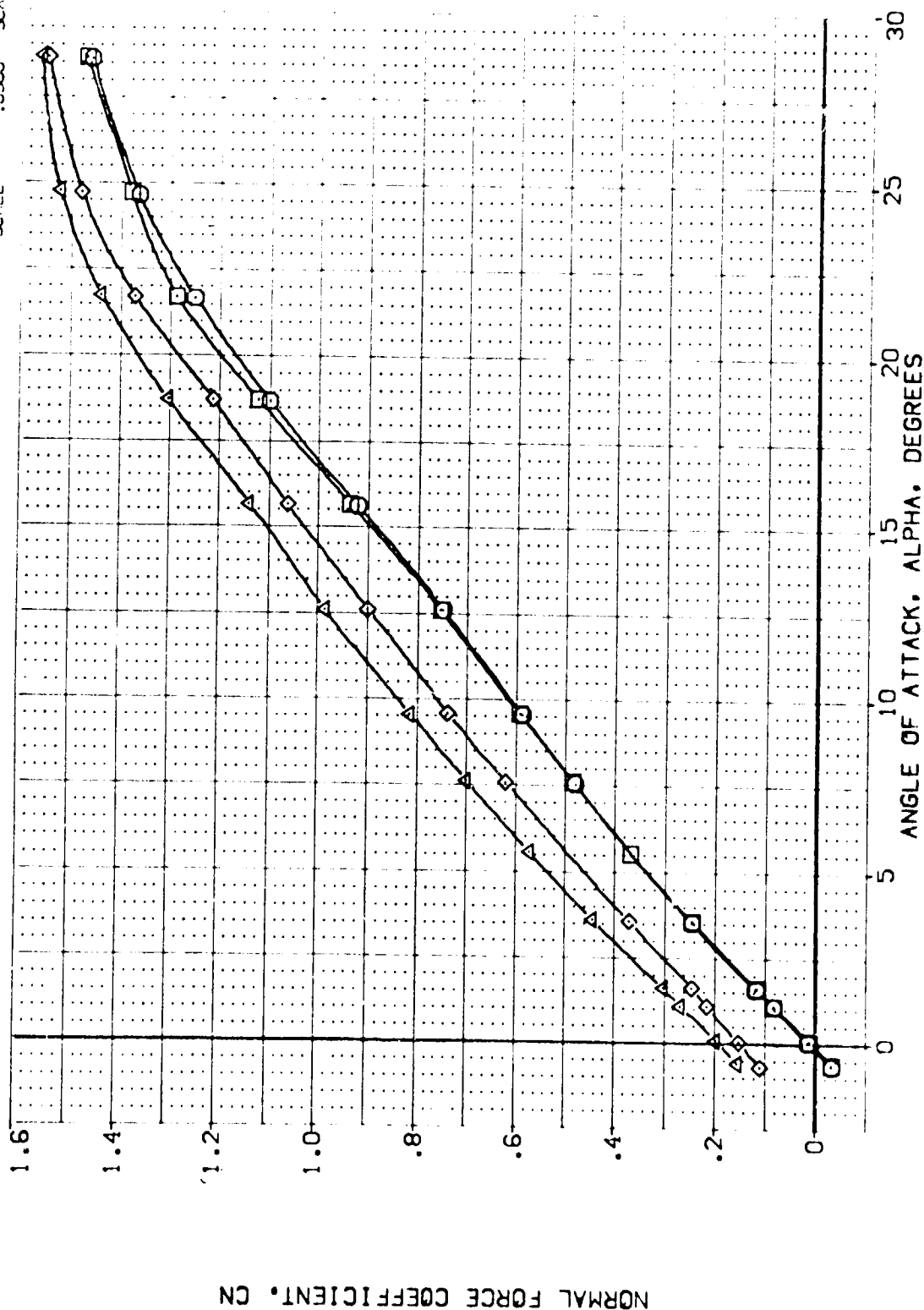


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(C)MACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NON-RV/L	SEAL.EL	ELEVON	AIRLON	BOFLAP	SPDRBK	REFERENCE INFORMATION
(TEJ010)	ARC 11-747 D453A B C M F VI V	NON-RV/L	SEAL.EL	.000	.000	16.300	25.000	SREF 2.4210
(TEJ050)	ARC 11-747 D453A B C M F VI V	NON-RV/L	SEAL.EL	.000	.000	16.300	25.000	LREF 14.2440
(TEJ008)	ARC 11-747 D453A B C M F VI V	NON-RV/L	SEAL.EL	15.000	.000	16.300	25.000	BREF 28.1004
(TEJ049)	ARC 11-747 D453A B C M F VI V	NON-RV/L	SEAL.EL	15.000	.000	16.300	25.000	XMREF 32.3010
								YMRP .0000
								ZMRP 11.7500
								SCALE .0000

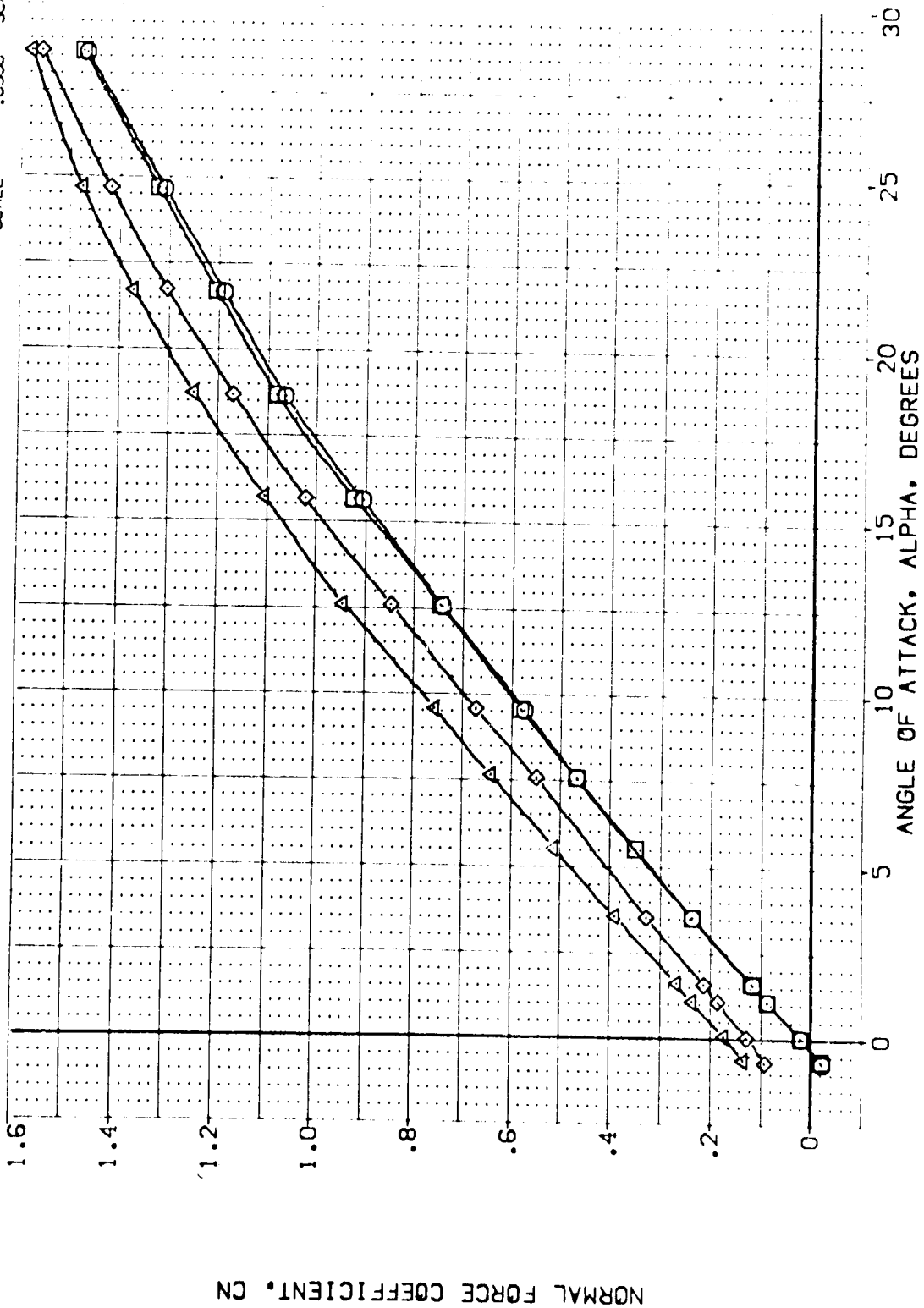


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(CJ)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	BOFLAP	SPOBRK	REFERENCE INFORMATION
(TEJ010)	ARC 11-747 DAS3A B C M F VI V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(TEJ050)	ARC 11-747 DAS3A B C M F VI V	.000	.000	16.300	25.000	LREF 14.2440
(TEJ008)	ARC 11-747 DAS3A B C M F VI V	15.000	.000	16.300	25.000	BREF 28.1004
(TEJ049)	ARC 11-747 DAS3A B C M F VI V	15.000	.000	16.300	25.000	XMRP 32.3010
						YMRP .0000
						ZMRP 11.2500
						SCALE .0300

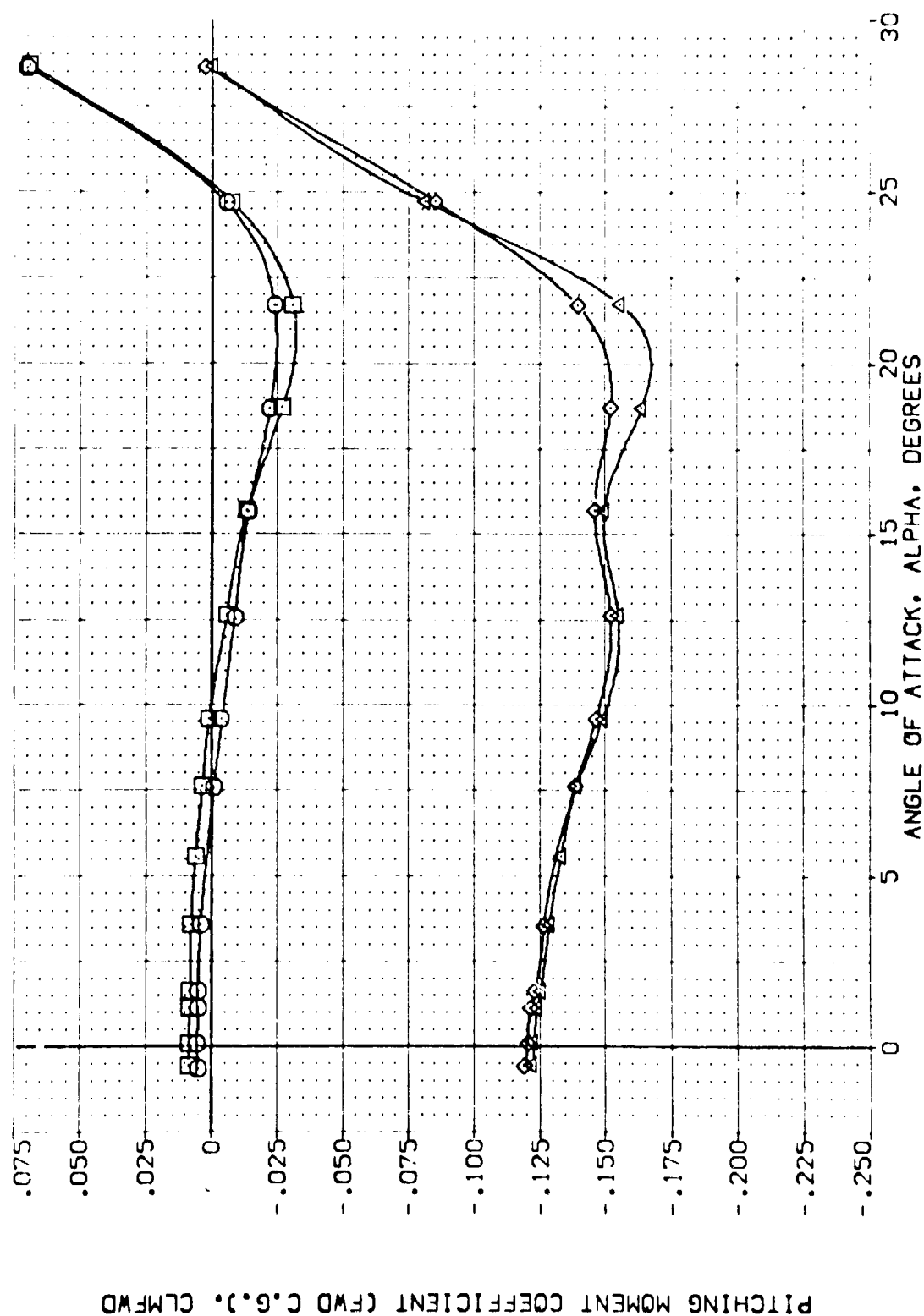


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(A)MACH = .60



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NOM.	RV/L	SEAL.EL	ELEVON	AILERON	BOFLAP	SPDRBK	REFERENCE INFORMATION
(TEJ010)	ARC 11-747 CA53A B C M F VI V	NOM.	RV/L	SEAL.EL	.000	.000	16.300	25.000	SREF 2.4210 SQ. FT.
(TEJ050)	ARC 11-747 CA53A B C M F VI V	NOM.	RV/L	SEAL.EL	.000	.000	16.300	25.000	LREF 14.2440
(TEJ008)	ARC 11-747 CA53A B C M F VI V	NOM.	RV/L	SEAL.EL	.000	.000	16.300	25.000	BREF 28.1000
(TEJ019)	ARC 11-747 CA53A B C M F VI V	NOM.	RV/L	SEAL.EL	.000	.000	16.300	25.000	YPRP 32.3000
									ZPRP 11.0000
									SCALE 11.2500
									SCALE .0300

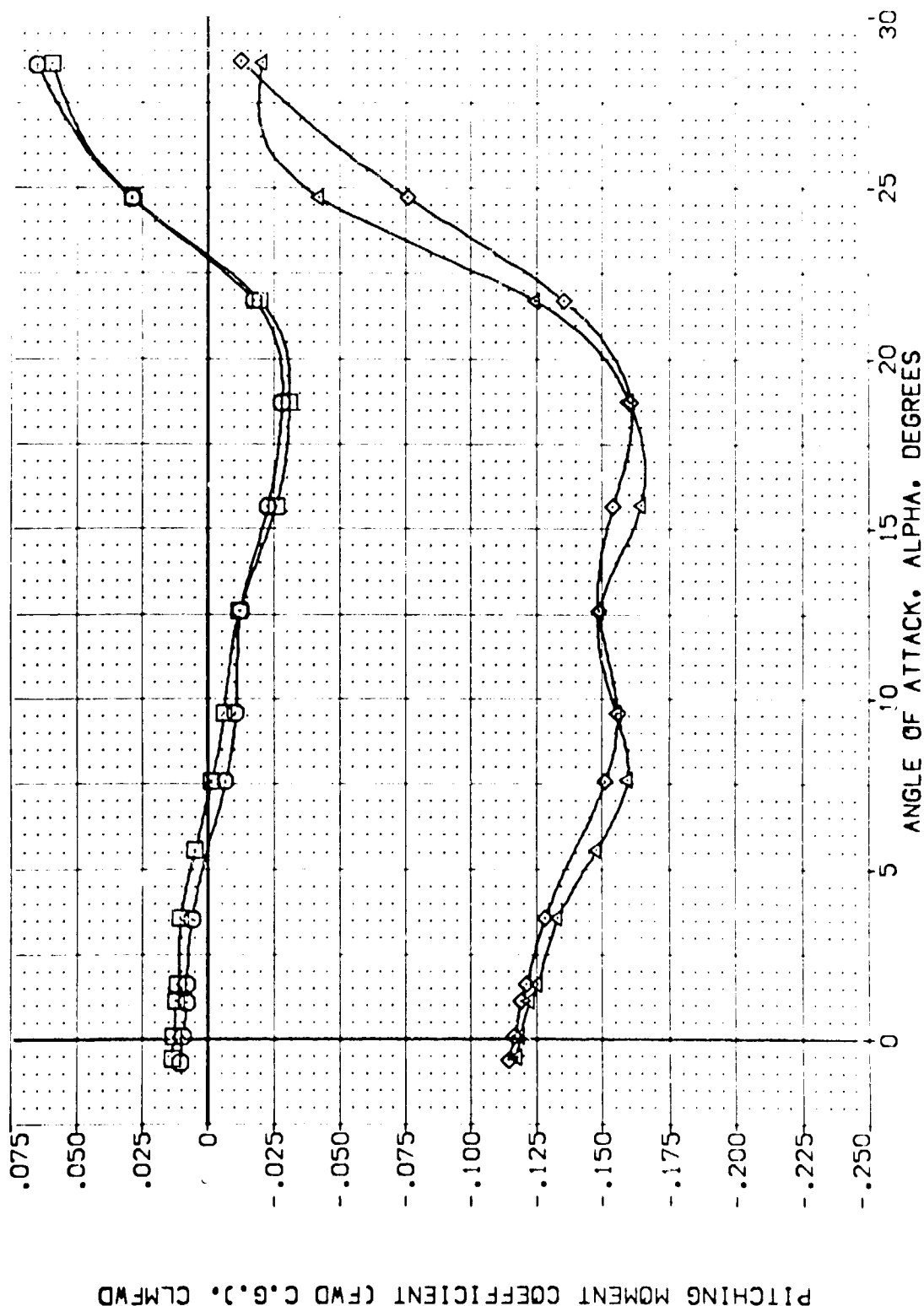


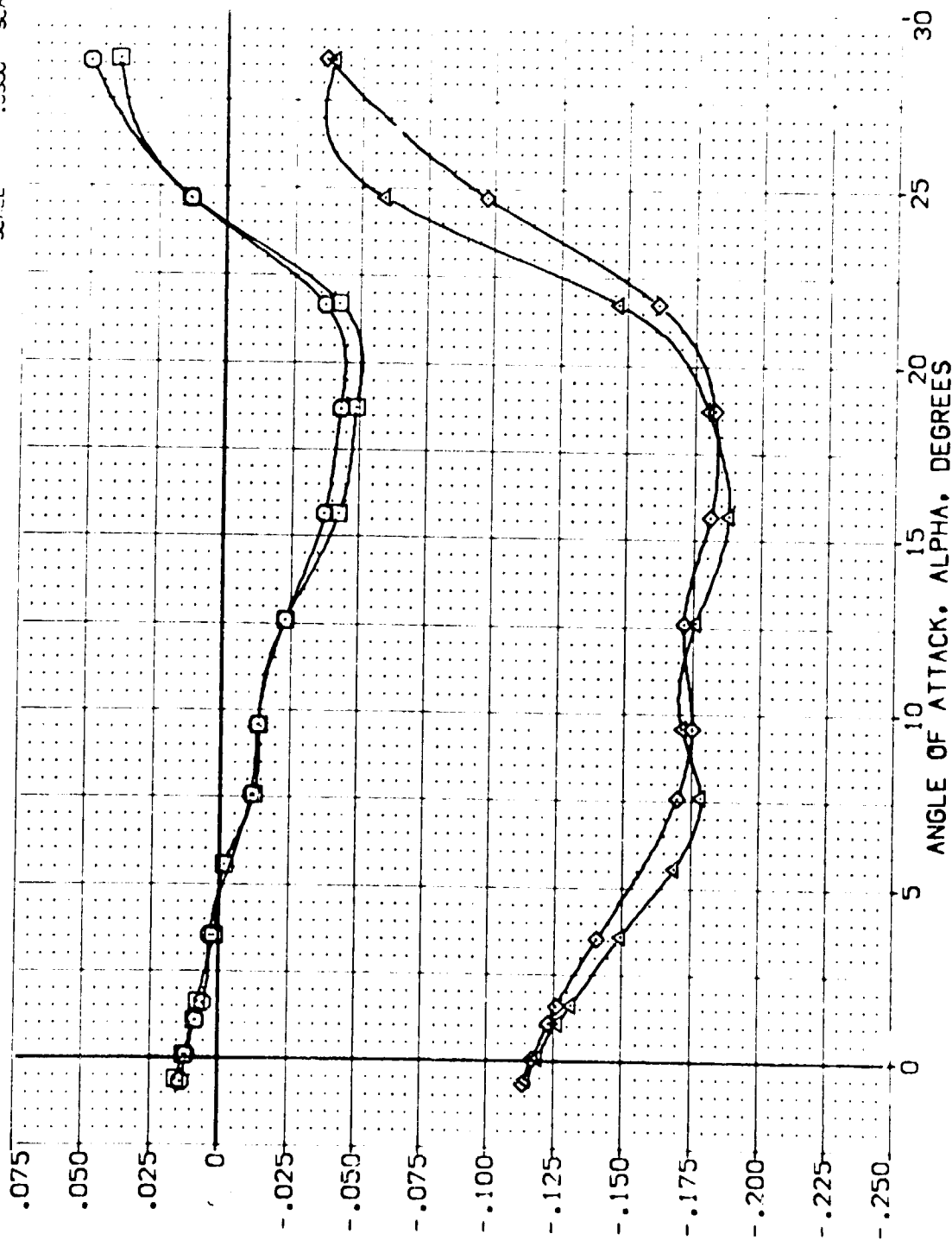
FIG. 10 SEALED ELEVON SPLIT EFFECTS

(B)MACH = .80

DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 (TEJ010) ARC 11-747 DA53A B C M F VI V  
 (TEJ050) ARC 11-747 DA53A B C M F VI V  
 (TEJ006) ARC 11-747 DA53A B C M F VI V  
 (TEJ019) ARC 11-747 DA53A B C M F VI V

ELEVON AIRLON BDF LAP SPOBRK  
 .000 .000 16.300 25.000  
 .000 .000 16.300 25.000  
 15.000 16.300 25.000

REFERENCE INFORMATION  
 SREF 2.4210 SC.FT.  
 LREF 14.2440 IN.  
 BREF 28.1004 IN.  
 XREF 32.3010 IN.  
 YREF 0.0000 IN.  
 ZREF 11.2500 IN.  
 SCALE .0300

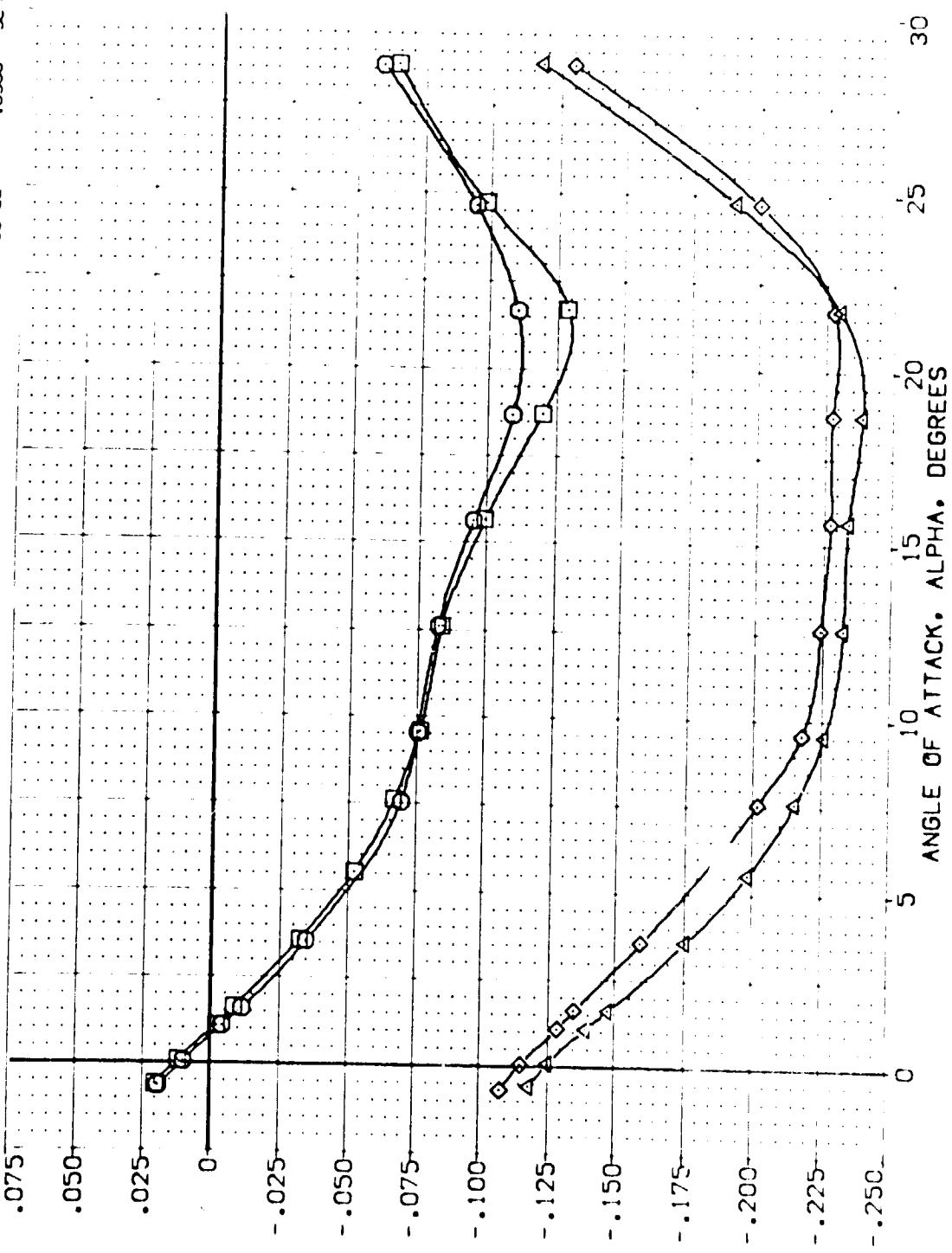


PITCHING MOMENT COEFFICIENT (FWD C.G.), CLMFW

FIG. 10 SEALED ELEVON SPLIT EFFECTS

(C)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AIRLON	BOFLAP	SPOBRK	REFERENCE INFORMATION
(TE4010)	ARC 11-747 DAS3A B C M F VI V	.000	.000	16.300	25.000	SREF 2.4210 50.ET.
(TE4050)	ARC 11-747 DAS3A B C M F VI V	.000	.000	16.300	25.000	LREF 14.2440
(TE4008)	ARC 11-747 DAS3A B C M F VI V	.000	.000	16.300	25.000	BREF 28.1000
(TE4019)	ARC 11-747 DAS3A B C M F VI V	.000	.000	16.300	25.000	XMRP 32.3000
						ZMRP .0000
						SCALE 11.2500
						SCALE .0300



PITCHING MOMENT COEFFICIENT (FWD C.G.), CLMFW

FIG. 10 SEALED ELEVON SPLIT EFFECTS

(C)MACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NOM.	RV/L	SEAL,EL	ELEVON	AIRLON	BOFLAP	SPOBRK	REFERENCE INFORMATION:
[TEJ010]	ARC 11-747 QAS3A B C M F VI V	NOM.	RV/L	SEAL,EL	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
[TEJ050]	ARC 11-747 QAS3A B C M F VI V	NOM.	RV/L	SEAL,EL	.000	.000	16.300	25.000	LREF 14.2440
[TEJ008]	ARC 11-747 QAS3A B C M F VI V	NOM.	RV/L	SEAL,EL	.000	.000	16.300	25.000	BREF 28.1004
[TEJ049]	ARC 11-747 QAS3A B C M F VI V	NOM.	RV/L	SEAL,EL	.000	.000	16.300	25.000	XMRD 32.3013
					.000	.000			YMRD .0000
					.000	.000			ZMRD .0000
					.000	.000			SCALE .0300

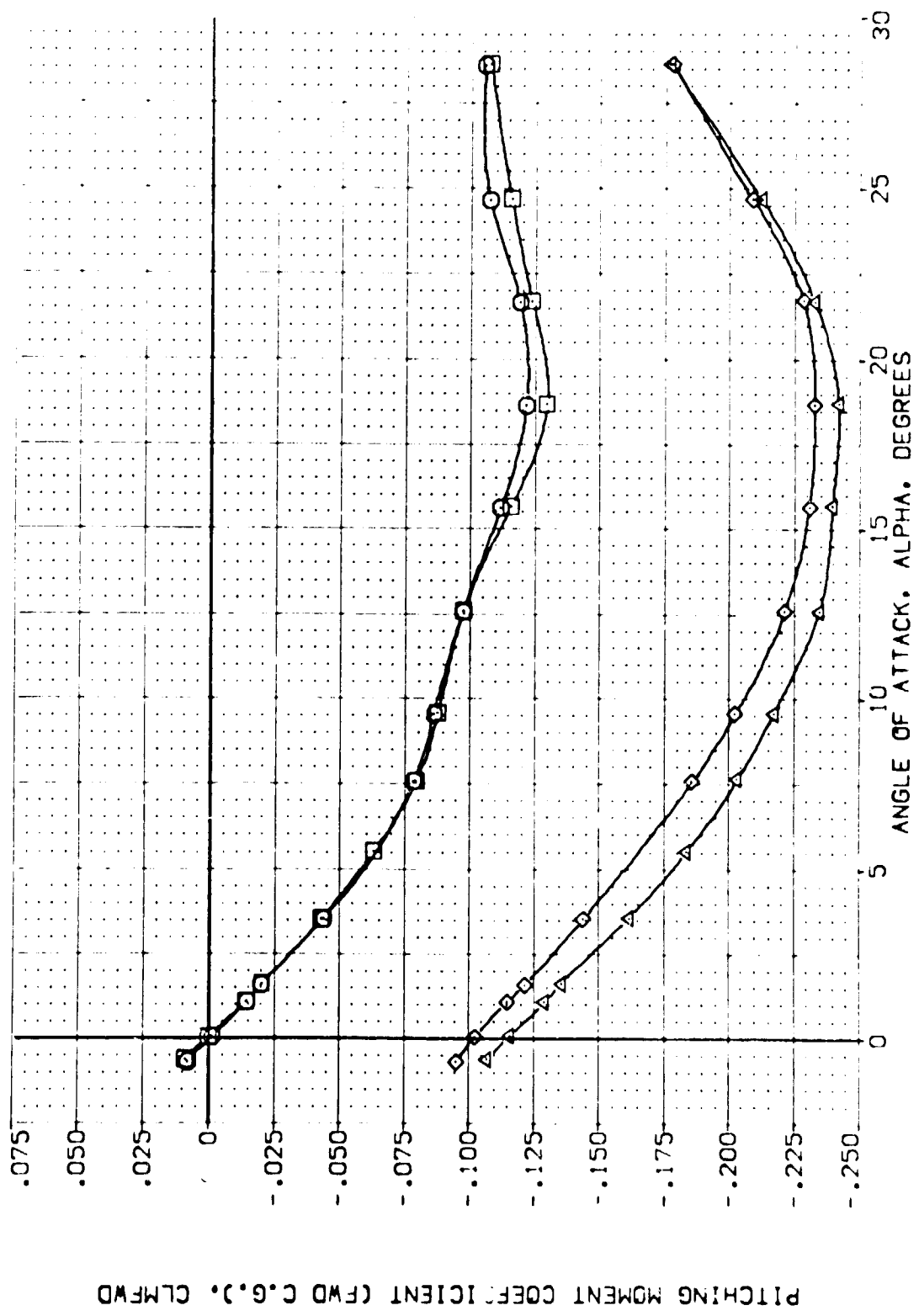
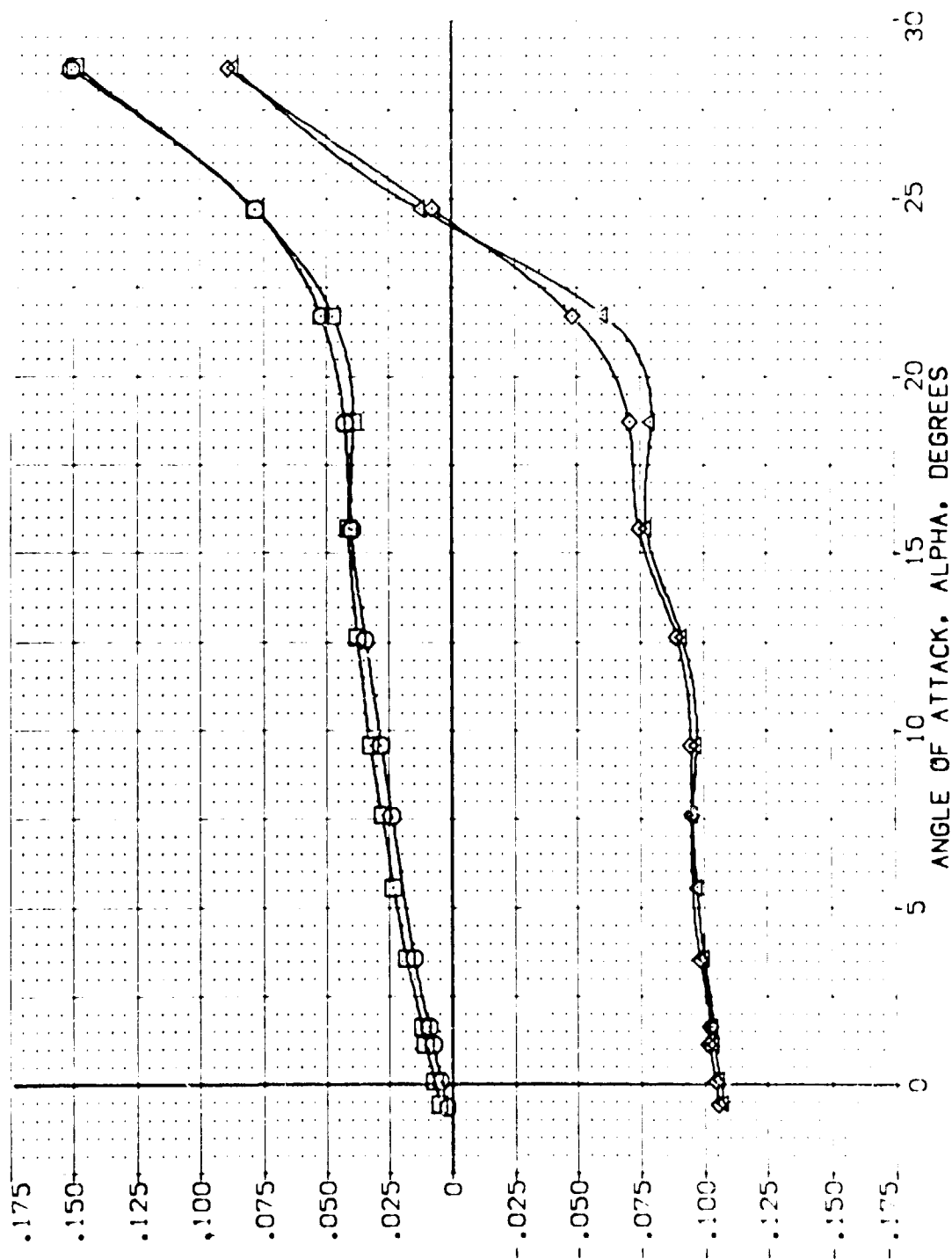


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(E)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NON-REF	REF	ELEVON	AIRLON	BOFLAP	SPDRK	REFERENCE INFORMATION
(1EJ010)	ARC 11-747 C-53A B C M F VI V	NON-REF	REF	.000	.000	16.300	25.000	SPREF 2.4210
(1EJ050)	ARC 11-747 C-53A B C M F VI V	NON-REF	REF	.000	.000	16.300	25.000	LBREF 14.2440
(1EJ008)	ARC 11-747 C-53A B C M F VI V	NON-REF	REF	.000	.000	16.300	25.000	BRREF 28.1000
(1EJ049)	ARC 11-747 C-53A B C M F VI V	NON-REF	REF	.000	.000	16.300	25.000	YHREF 30.3010
								ZHREF 11.2500
								SCALE 11.0300



PITCHING MOMENT COEFFICIENT (Cm) C.G., CLMFT

FIG. 10 SEALED ELEVON SPLIT EFFECTS

(M)MACH = .60

DATA SET SYMB.	CONFIGURATION DESCRIPTION	ELEVON	AIRLIFT	BOFLAP	SPEEDK	REFERENCE INFORMATION
(TFJ010)	ARC 11-747 0A53A B C H F VI V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(TFJ020)	ARC 11-747 0A53A B C H F VI V	.000	.000	16.300	25.000	LREF 14.2440
(TFJ008)	ARC 11-747 0A53A B C H F VI V	.000	.000	16.300	25.000	BREF 28.1004
(TFJ049)	ARC 11-747 0A53A B C H F VI V	.000	.000	16.300	25.000	XMRP 32.3010
						YMRP .0000
						ZMRP 11.7500
						SCALE .0300

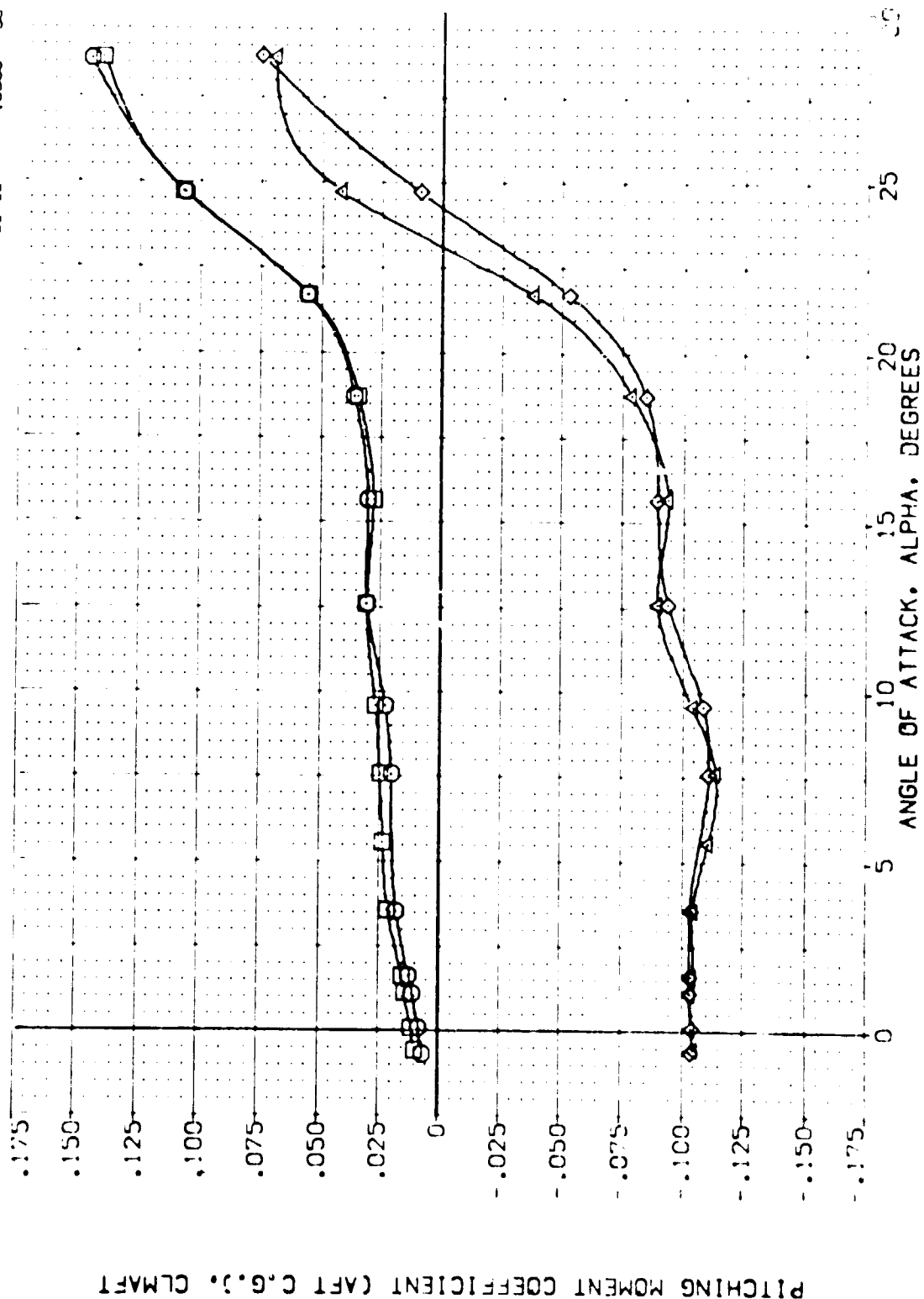


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(B)MACH = .80



DATA SET SYMBOL: (TEJ010) (TEJ050) (TEJ008) (TEJ049)

CONFIGURATION DESCRIPTION: ARC 11-747 DA53A B C M F VI V ARC 11-747 DA53A B C M F VI V ARC 11-747 DA53A B C M F VI V ARC 11-747 DA53A B C M F VI V

ELEVON: .000 .000 .000 .000

SEAL.EL: SEAL.EL SEAL.EL SEAL.EL

NON: RV/L RV/L RV/L RV/L

AILERON: .000 .000 .000 .000

BOFLAP: 16.300 16.300 16.300 16.300

SPOBRK: 25.000 25.000 25.000 25.000

REFERENCE INFORMATION: SREF: 2.4210 SQ.FT. LREF: 14.244C ZREF: 28.1004 XMRP: 32.3010 YMRP: .0000 ZMRP: 11.2500 SCALE: .0300

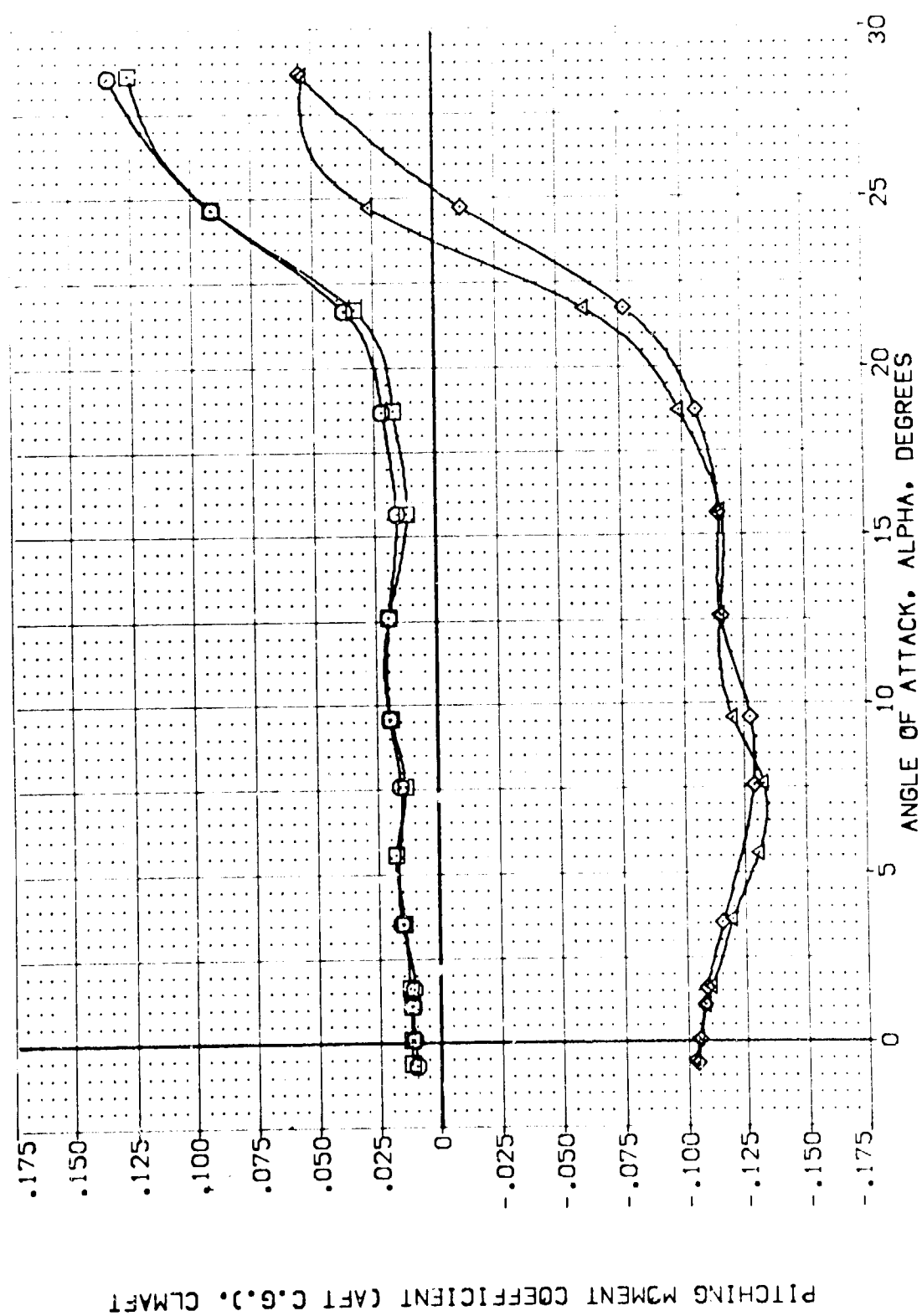
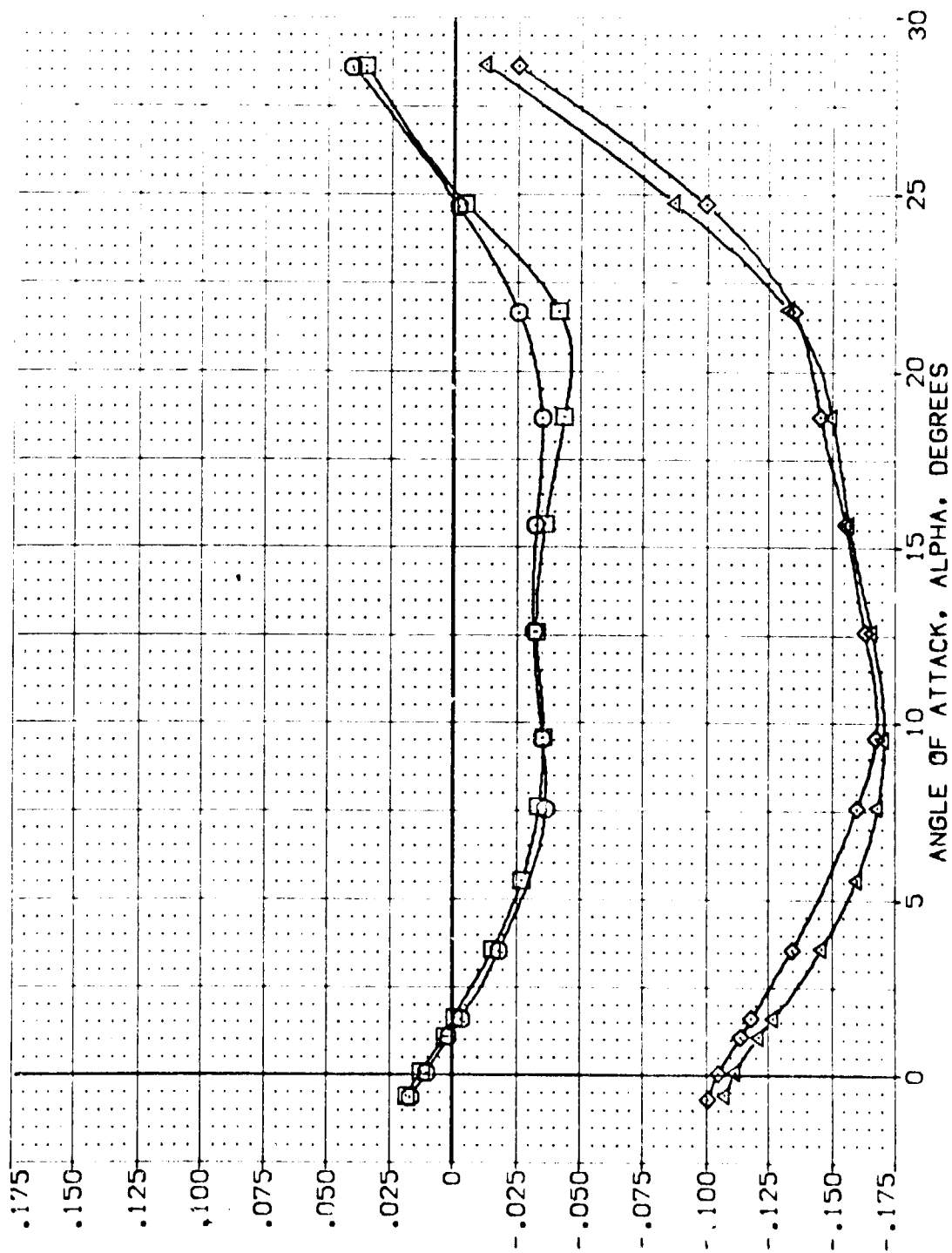


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(C)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NO.1	RV/L	SEAL EL	ELEVON	AIRLON	BOFLAP	SPOBRK	REFERENCE INFORMATION
(1EJ010)	ARC 11-747 0A53A B C M F VI V	NO.1	RV/L	SEAL EL	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(1EJ050)	ARC 11-747 0A53A B C M F VI V	NO.1	RV/L	SEAL EL	.000	.000	16.300	25.000	LREF 14.2443 IN.
(1EJ008)	ARC 11-747 0A53A B C M F VI V	NO.1	RV/L	SEAL EL	15.000	.000	16.300	25.000	BREF 28.1004 IN.
(1EJ049)	ARC 11-747 0A53A B C M F VI V	NO.1	RV/L	SEAL EL	15.000	.000	16.300	25.000	XMRP 32.3010 IN.
									YMRP .0000 IN.
									ZMRP 11.2500 IN.
									SCALE .0300



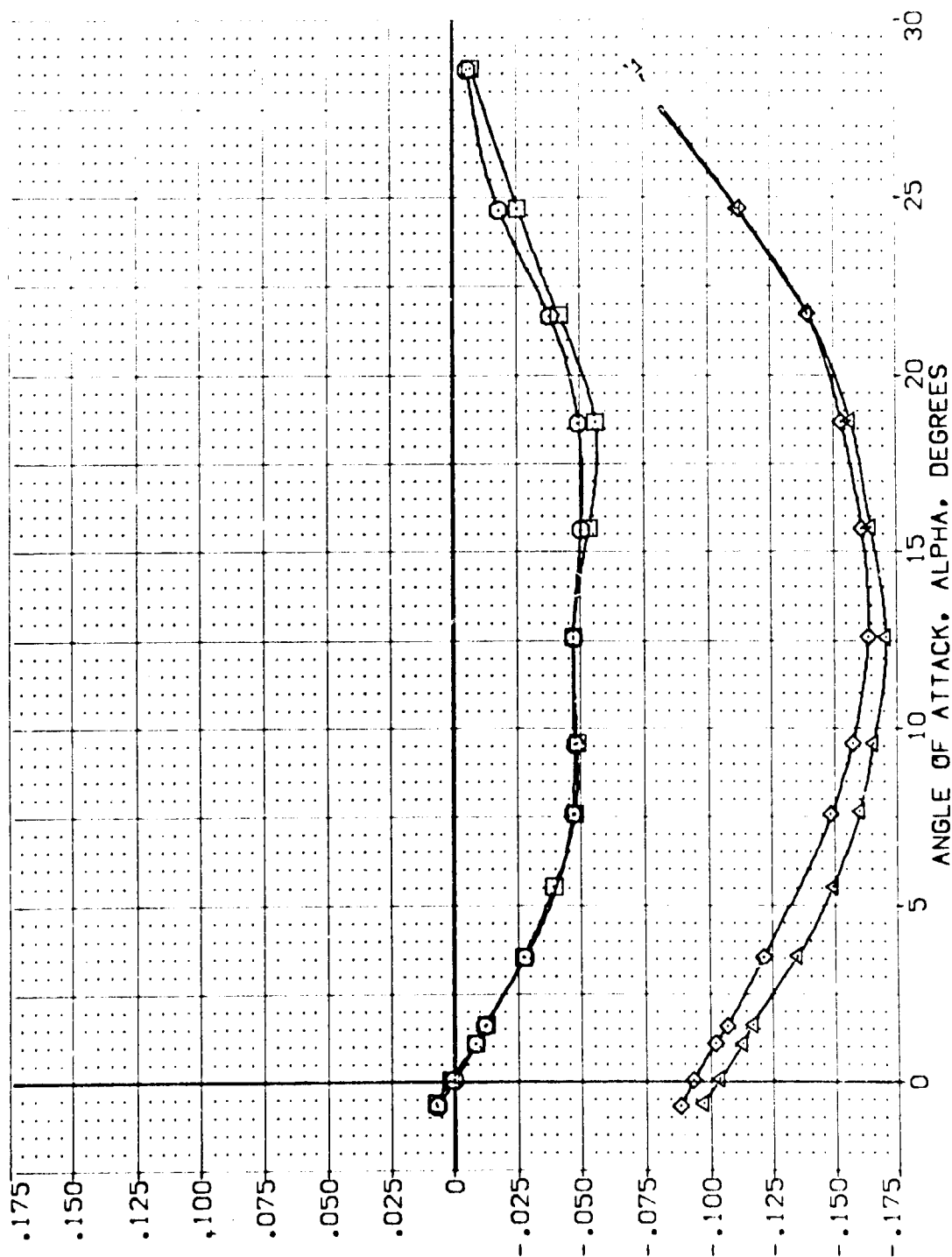
PITCHING MOMENT COEFFICIENT (Cm) C.G., CLMFT

FIG. 10 SEALED ELEVON SPLIT EFFECTS

(D)MACH = 1.05



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NOM.	RV/L	SEAL.E/L	ELEVON	AIRLON	BOFLAP	SPDBRK	REFERENCE INFORMATION
(TEJ010)	ARC 11-747 DAS3A B C M F VI V	NOM.	RV/L	SEAL.E/L	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(TEJ050)	ARC 11-747 DAS3A B C M F VI V	NOM.	RV/L	SEAL.E/L	.000	.000	16.300	25.000	LREF 14.2440 IN.
(TEJ080)	ARC 11-747 DAS3A B C M F VI V	NOM.	RV/L	SEAL.E/L	15.000	.000	16.300	25.000	BREF 28.1004 IN.
(TEJ040)	ARC 11-747 DAS3A B C M F VI V	NOM.	RV/L	SEAL.E/L	15.000	.000	16.300	25.000	XMRP 32.3010 IN.
									YMRP .0000 IN.
									ZMRP 11.2500 IN.
									SCALE .0300



PITCHING MOMENT COEFFICIENT (CFT C.G.), CLMAFT

FIG. 10 SEALED ELEVON SPLIT EFFECTS

(C)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NOM.	RU/L	SEAL. EL	ELEVON	AIRLON	BOF LAP	SPDRK	REFERENCE INFORMATION
(TEJ010)	ARC 11-747 QAS3A B C M F VI	V			.000	.000	16.300	25.000	SREF 2.4710 SQ.FT.
(TEJ050)	ARC 11-747 QAS3A B C M F VI	V			.000	.000	16.300	25.000	LREF 14.2440 IN.
(TEJ008)	ARC 11-747 QAS3A B C M F VI	V			15.000	.000	16.300	25.000	BREF 28.1004 IN.
(TEJ049)	ARC 11-747 QAS3A B C M F VI	V			15.000	.000	16.300	25.000	YMPP 32.3010 IN.
									ZMPP 11.7500 IN.
									SCALE .0300

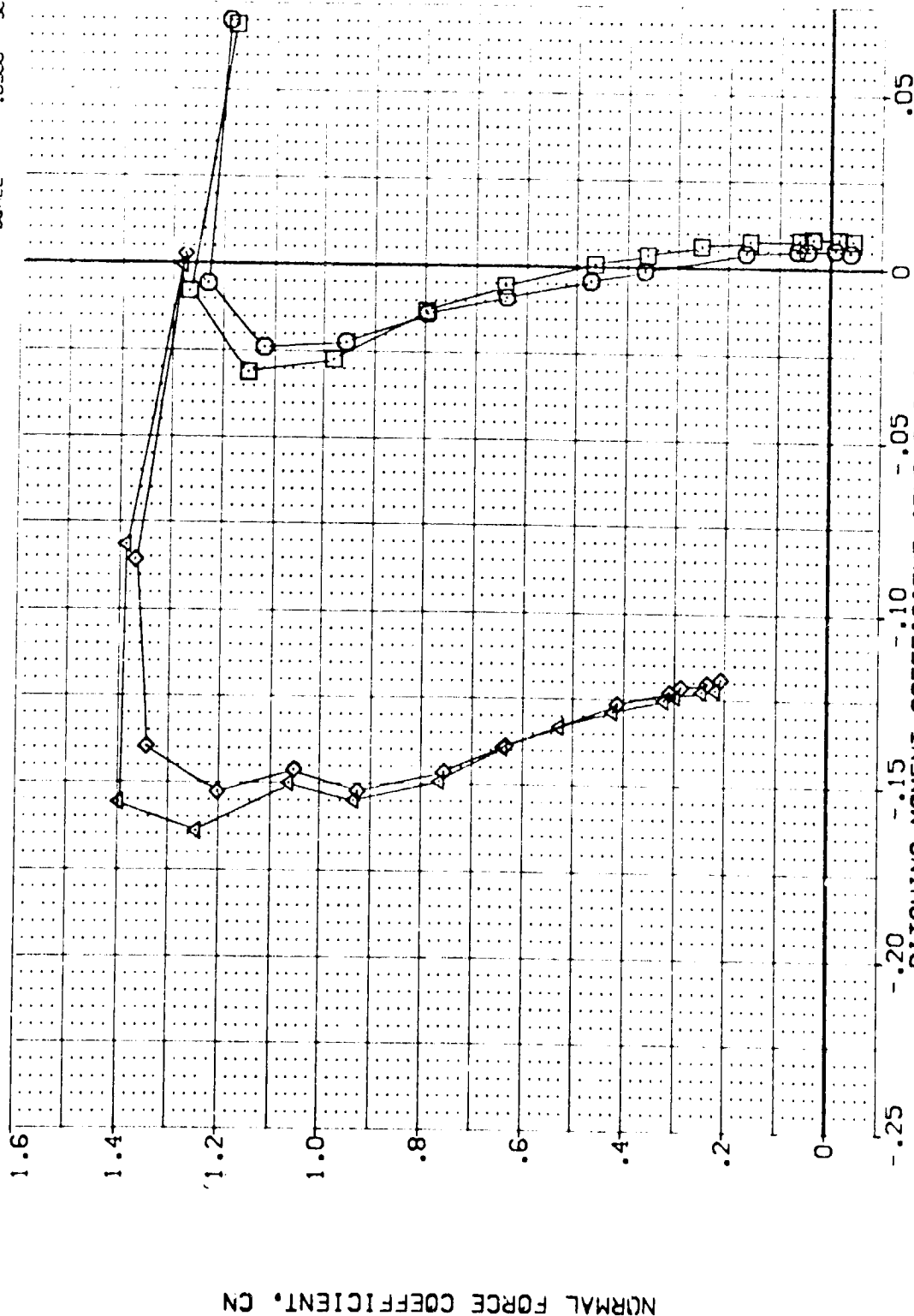


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(A)MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NOM.	RV/L	SEAL, EL	ELEVON	AIRLON	BDF LAP	SPODBRK	REFERENCE INFORMATION
(TEJ010)	ARC 11-747 D453A B C M F V1 V	NOM.	RV/L	SEAL, EL	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(TEJ050)	ARC 11-747 D453A B C M F V1 V	NOM.	RV/L	SEAL, EL	.000	.000	16.300	25.000	LREF 14.2440 IN.
(TEJ008)	ARC 11-747 D453A B C M F V1 V	NOM.	RV/L	SEAL, EL	15.000	.000	16.300	25.000	BREF 28.1004 IN.
(TEJ049)	ARC 11-747 D453A B C M F V1 V	NOM.	RV/L	SEAL, EL	15.000	.000	16.300	25.000	XMRP 32.3010 IN.
									YMRP .0000 IN.
									ZMRP 11.2500 IN.
									SCALE .0300

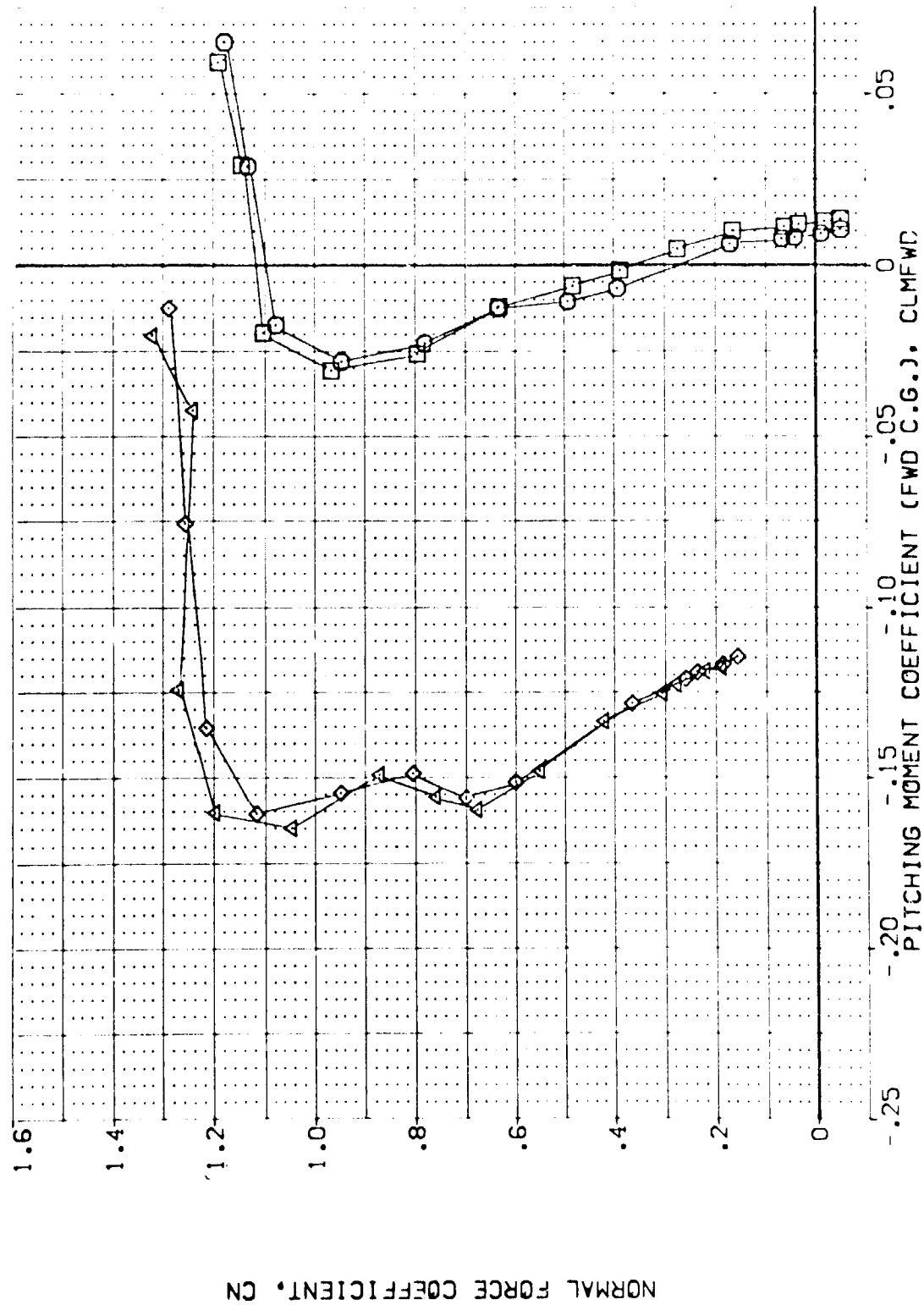


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(B)MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NOM. RV/L	SEAL. EL	ELEVON	AILRON	BDLAP	SPDRK	REFERENCE INFORMATION
(TEJ010)	ARC 11-747 D453A B C M F V1 V	NOM. RV/L	SEAL. EL	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(TEJ050)	ARC 11-747 D453A B C M F V1 V	NOM. RV/L	SEAL. EL	.000	.000	16.300	25.000	LREF 14.2440 IN.
(TEJ008)	ARC 11-747 D453A B C M F V1 V	NOM. RV/L	SEAL. EL	.000	.000	16.300	25.000	BREF 28.1004 IN.
(TEJ049)	ARC 11-747 D453A B C M F V1 V	NOM. RV/L	SEAL. EL	15.000	.000	16.300	25.000	XMRP 32.30.0 IN.
								YMRP .0000 IN.
								ZMRP 11.2500 IN.
								SCALE .0300

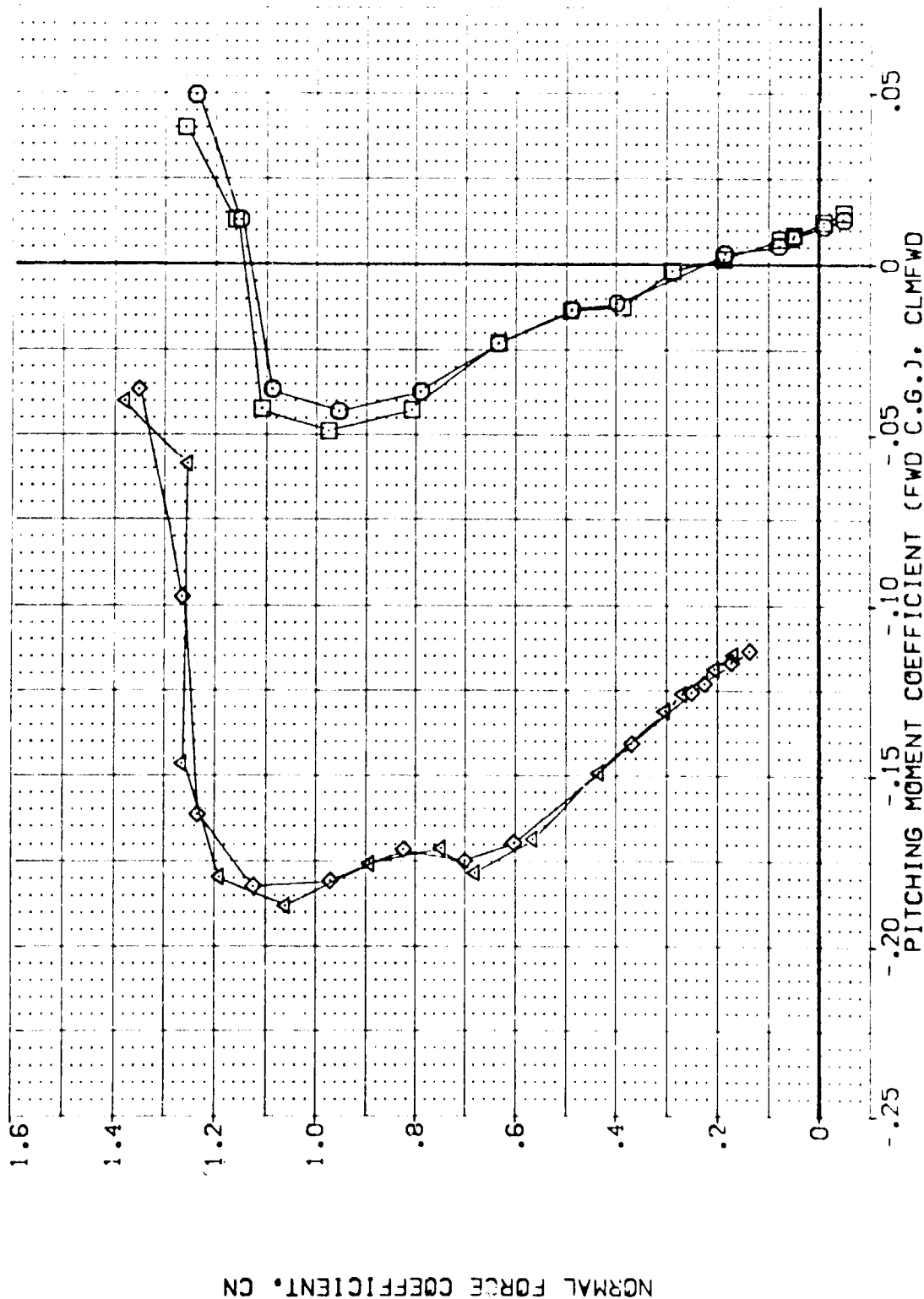


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(C)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NOM.	RV/L	SEAL.EL	ELEVON	AILERON	BOFLAP	SFOBRK	REFERENCE INFORMATION
(TEJ010)	ARC 11-747 OAS3A B C M F V	V	NOM.	RV/L	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(TEJ050)	ARC 11-747 OAS3A B C M F V	V	NOM.	RV/L	.000	.000	16.300	25.000	LREF 14.2440 IN.
(TEJ008)	ARC 11-747 OAS3A B C M F V	V	NOM.	RV/L	15.000	.000	16.300	25.000	BREF 28.1004 IN.
(TEJ049)	ARC 11-747 OAS3A B C M F V	V	NOM.	RV/L	15.000	.000	16.300	25.000	XMRP 32.3010 IN.
									ZMRP .0000 IN.
									SCALE 11.2500
									SCALE .0300

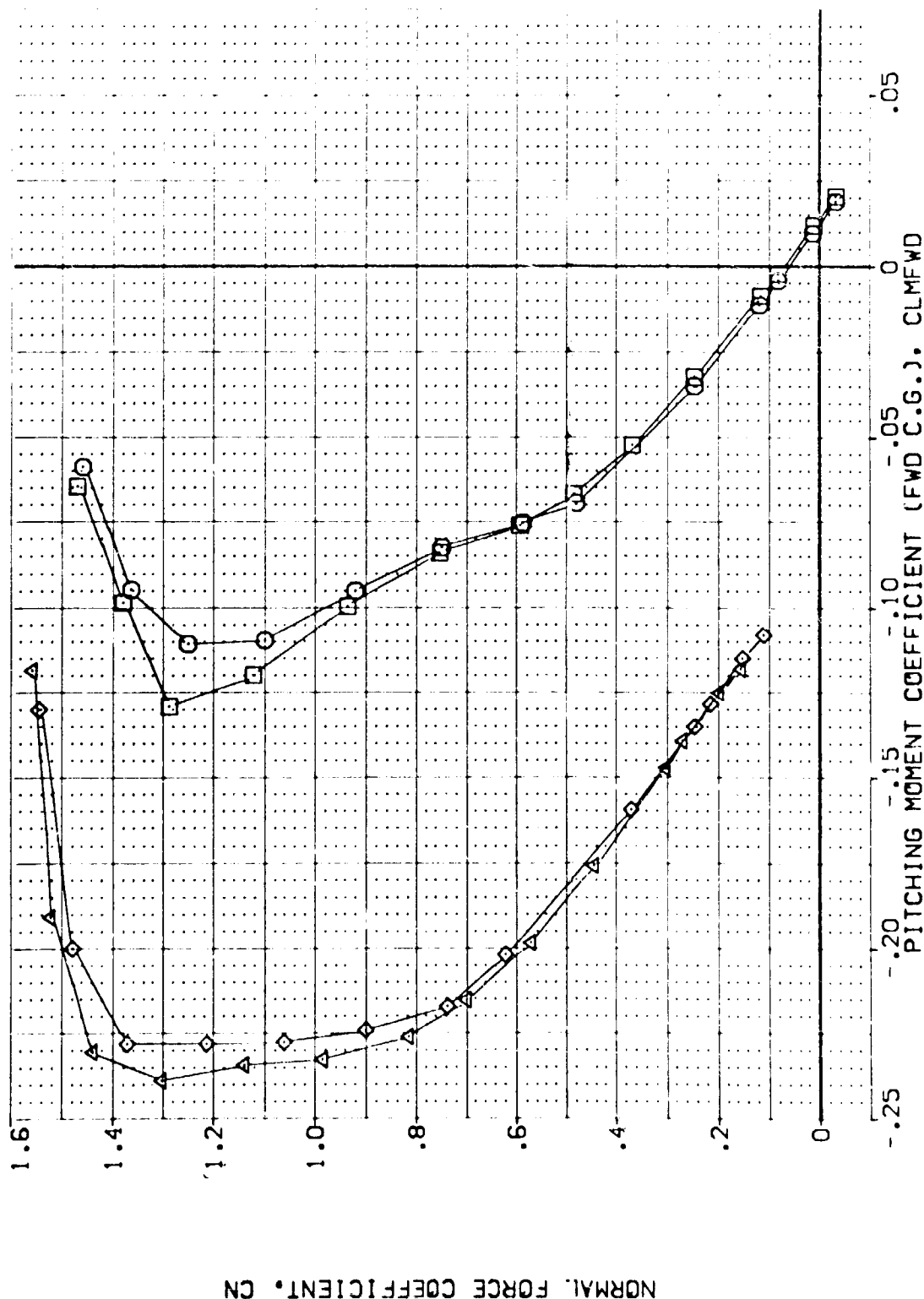


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(CM)MACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NOM.	RV/L	SEAL .EL	ELEVON	AIRLON	BOLAP	SPDRK	REFERENCE INFORMATION
(TE4010)	ARC 11-747 DA53A B C M F V1	V			.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(TE4050)	ARC 11-747 DA53A B C M F V1	V			.000	.000	16.300	25.000	LREF 14.2440 IN.
(TE4008)	ARC 11-747 DA53A B C M F V1	V			.000	.000	16.300	25.000	BREF 28.1004 IN.
(TE4019)	ARC 11-747 DA53A B C M F V1	V			.000	.000	16.300	25.000	XMRP 32.3010 IN.
									YMRP .0000 IN.
									ZMRP 11.2500 IN.
									SCALE .0300

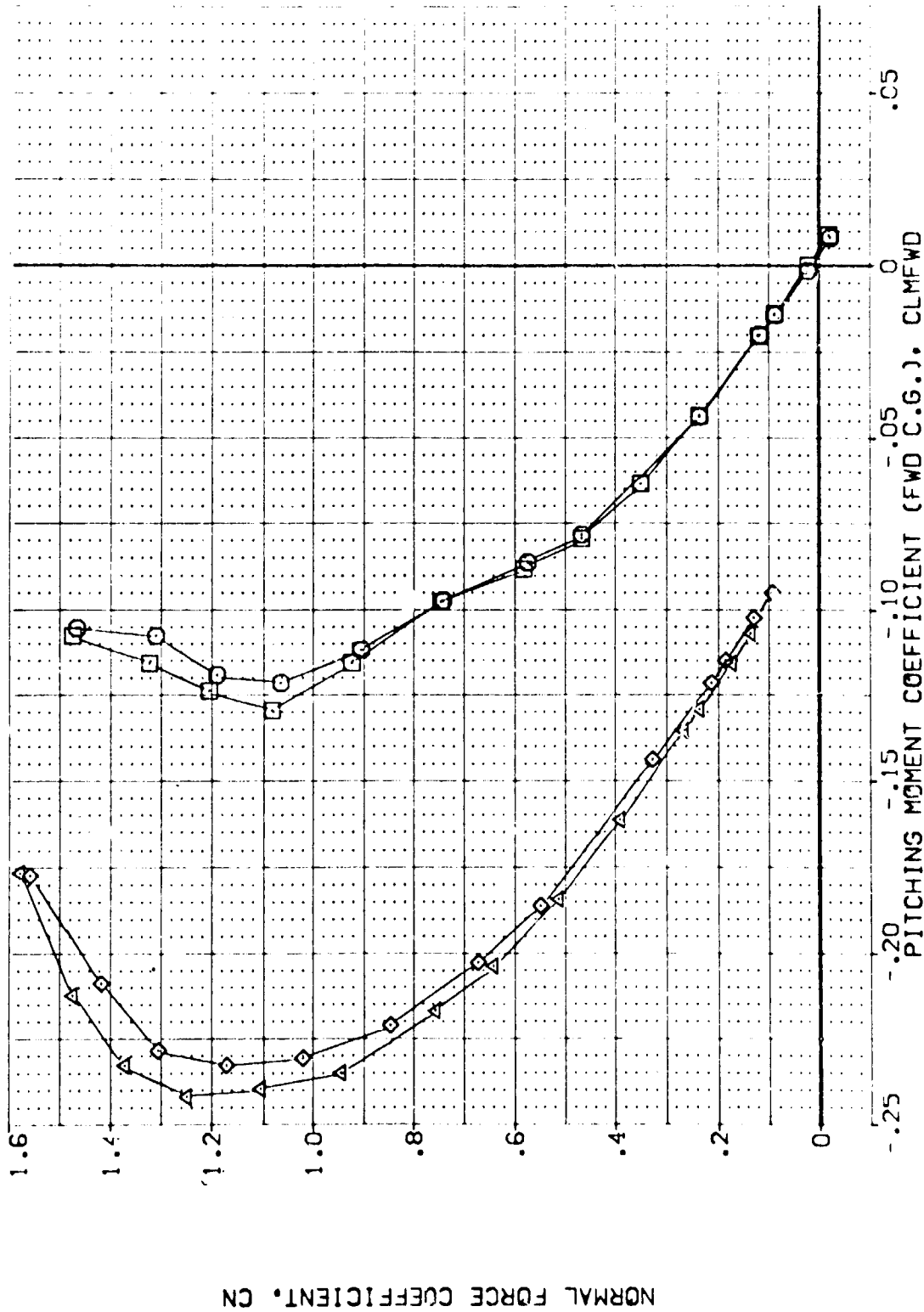


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(C)MACH 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NOH	RV/L	SEAL.EL	ELEVON	AILRON	BOFLAP	SPDBRK	REFERENCE INFORMATION
(TEJ0110)	ARC 11-747 DA53A B C M F VI V	NOH	RV/L	SEAL.EL	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(TEJ050)	ARC 11-747 DA53A B C M F VI V	NOH	RV/L	SEAL.EL	.000	.000	16.300	25.000	LREF 14.2440 IN.
(TEJ008)	ARC 11-747 DA53A B C M F VI V	NOH	RV/L	SEAL.EL	15.000	.000	16.300	25.000	BREF 28.1004 IN.
(TEJ049)	ARC 11-747 DA53A B C M F VI V	NOH	RV/L	SEAL.EL	15.000	.000	16.300	25.000	XMRP 32.3010 IN.
									YMRP .0000 IN.
									ZMRP 11.2500 IN.
									SCALE .0300

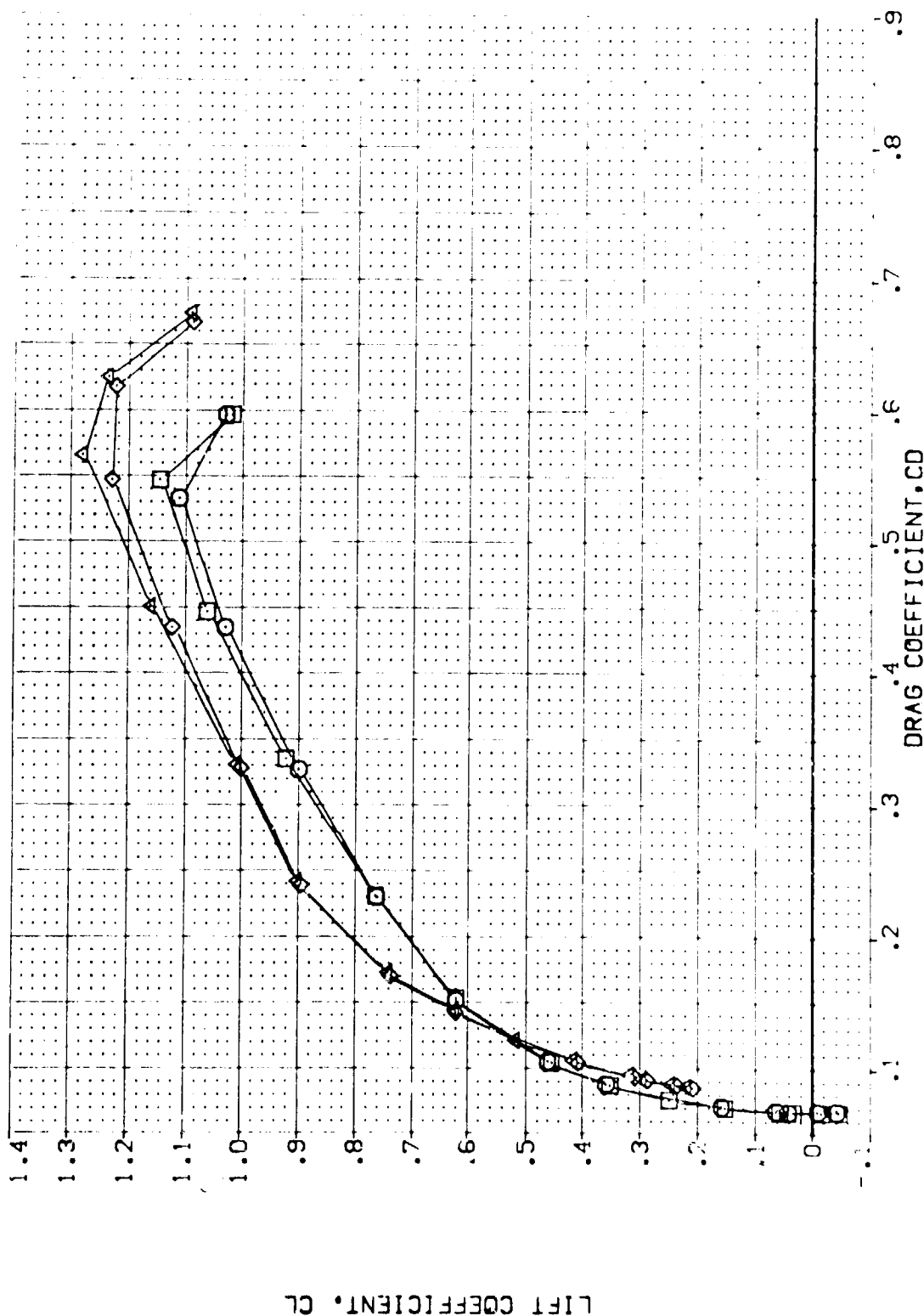


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(A)MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NON.	RV/L	SEAL.EL	ELEVON	AILERON	BDFLAP	SPDBRK	REFERENCE INFORMATION
(TEJ010)	ARC 11-747 DASSA B C M F V	V			.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(TEJ050)	ARC 11-747 DASSA B C M F V	V			.000	.000	16.300	25.000	LREF 14.2440 IN.
(TEJ008)	ARC 11-747 DASSA B C M F V	V			.000	.000	16.300	25.000	BREF 28.1004 IN.
(TEJ049)	ARC 11-747 DASSA B C M F V	V			.000	.000	16.300	25.000	XMRP 32.3010 IN.
									YMRP .0000 IN.
									ZMRP 11.2500 IN.
									SCALE .0300

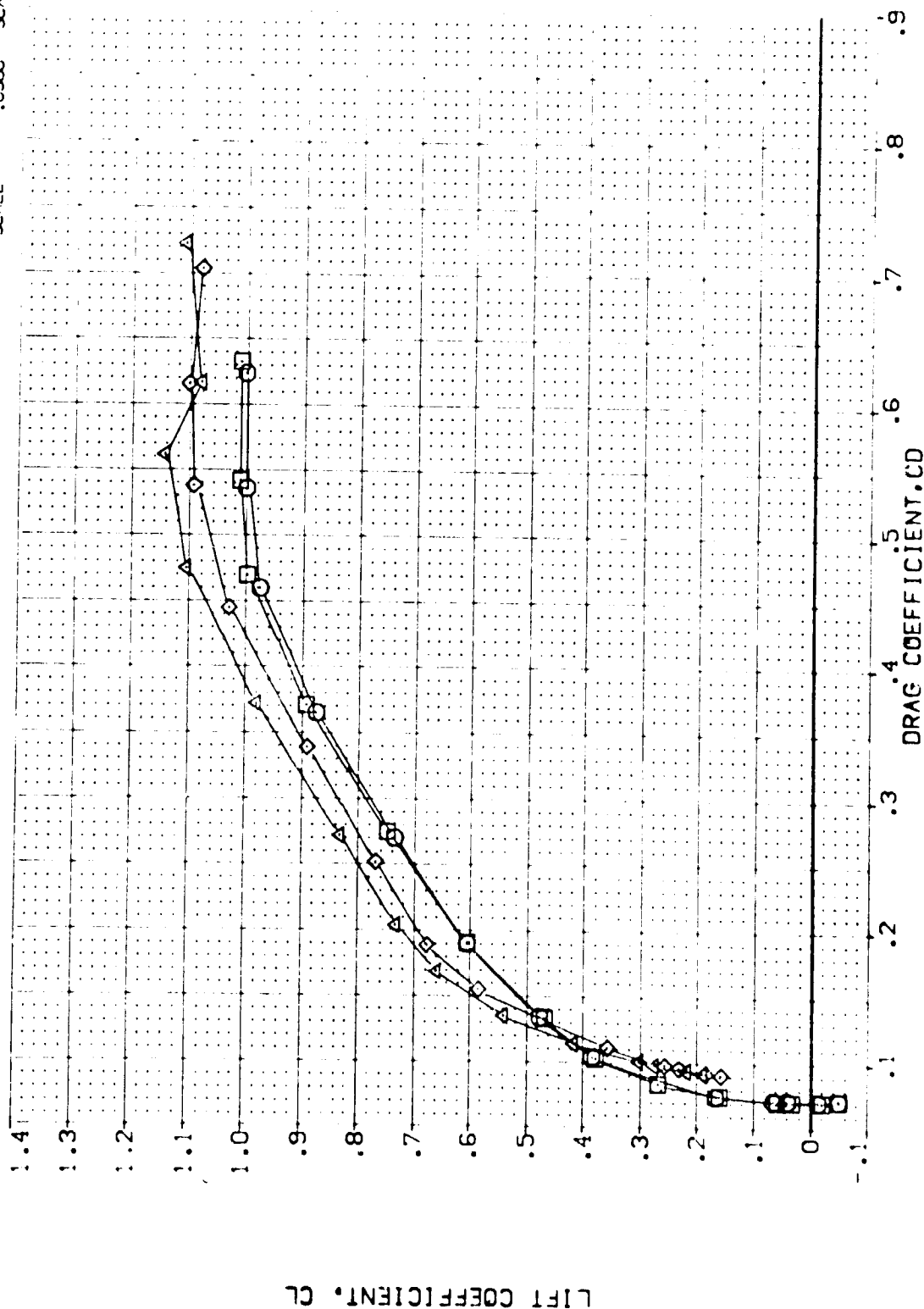


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(B)MACH .80



DATA SET SYMBOL CONFIGURATION DESCRIPTION

[TEJ010]	ARC 11-747	DA53A	B	C	M	F	V1	V
[TEJ050]	ARC 11-747	DA53A	B	C	M	F	V1	V
[TEJ008]	ARC 11-747	DA53A	B	C	M	F	V1	V
[TEJ049]	ARC 11-747	DA53A	B	C	M	F	V1	V

ELEVON AIRLON BDF LAP SPOBRK

ELEVON	AIRLON	BDF LAP	SPOBRK
.000	.000	16.300	25.000
.000	.000	16.300	25.000
.000	.000	16.300	25.000
.000	.000	16.300	25.000

REFERENCE INFORMATION

SREF	2.4210	SQ.FT.
LREF	14.2440	IN.
BREF	28.1004	IN.
XMRP	32.3010	IN.
YMRP	.0000	IN.
ZMRP	11.2300	IN.
SCALE	.0300	SCALE

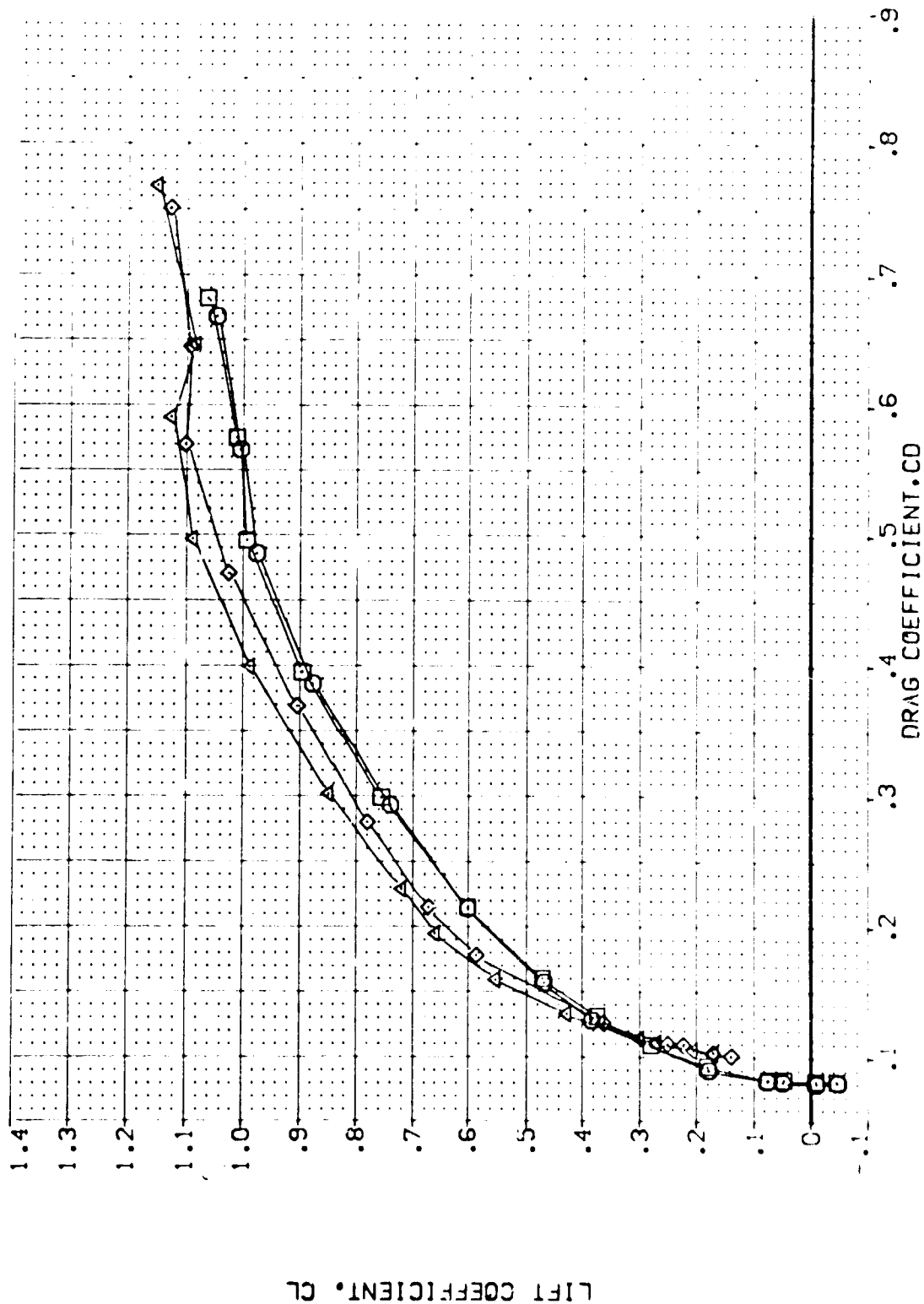


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(COMACH = .90)

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NON.	RV/L	SEAL EL.	ELEVON	AILERON	BOFLAP	SPOBRK	REFERENCE INFORMATION
(TEJ010)	ARC 11-747 C453A B C H F VI	NON.	RV/L	SEAL EL.	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(TEJ050)	ARC 11-747 C453A B C H F VI	NON.	RV/L	SEAL EL.	.000	.000	16.300	25.000	LREF 14.2440 N.
(TEJ008)	ARC 11-747 C453A B C H F VI	NON.	RV/L	SEAL EL.	15.000	.000	16.300	25.000	BREF 28.1004 N.
(TEJ049)	ARC 11-747 C453A B C H F VI	NON.	RV/L	SEAL EL.	15.000	.000	16.300	25.000	XMRP 32.3010 N.
									YMRP .0000 N.
									ZMRP 11.2500 N.
									SCALE .0300

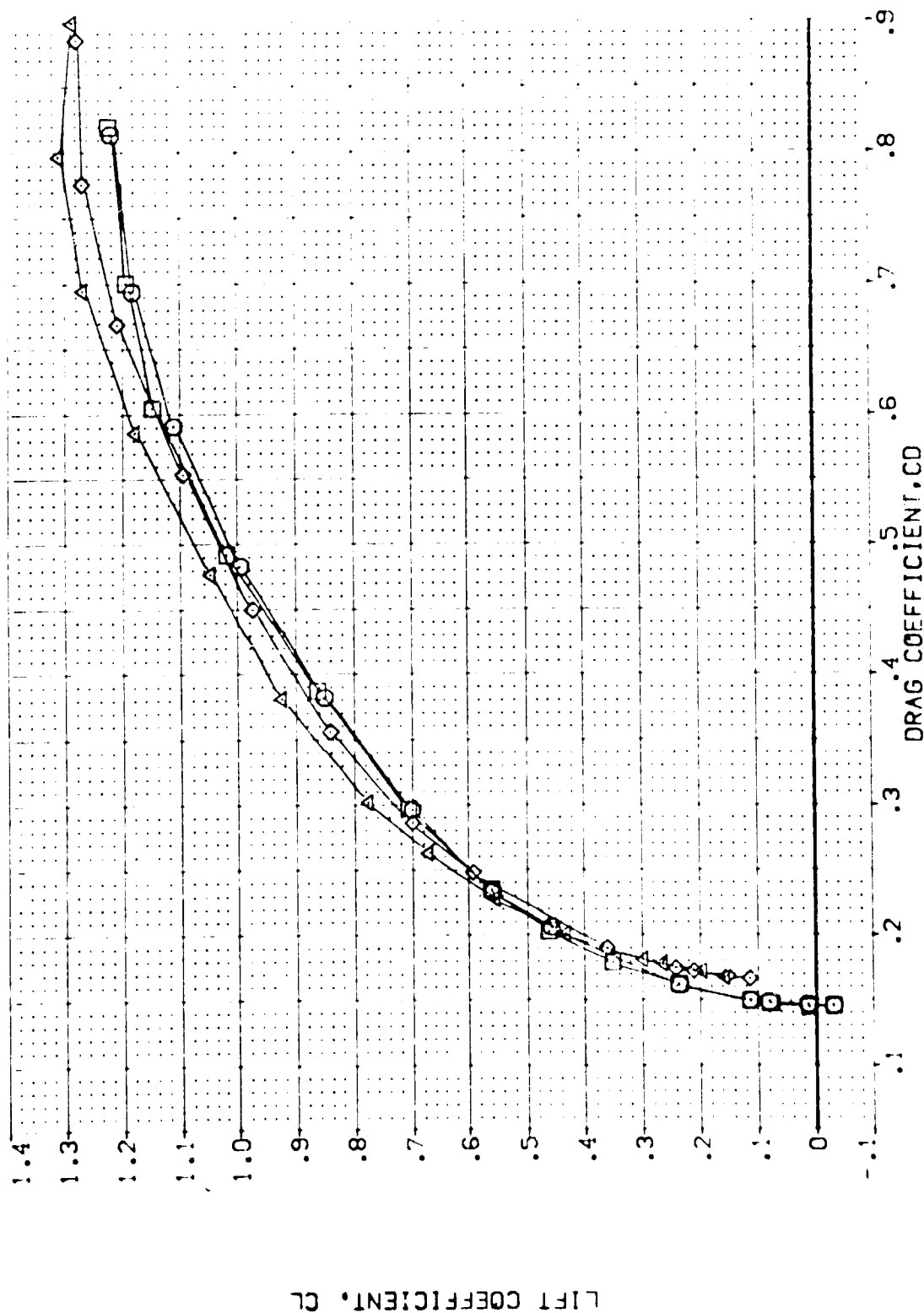


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(D)MACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPOILER	REFERENCE INFORMATION
TE4010	ARC -747 DASSA B C M F VI V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
TE4050	ARC -747 DASSA B C M F VI V	.000	.000	16.300	25.000	LREF 14.2440
TE4008	ARC -747 DASSA B C M F VI V	15.000	.000	16.300	25.000	BREF 28.1000
TE4049	ARC -747 DASSA B C M F VI V	15.000	.000	16.300	25.000	YREF 32.3010
						YREF 11.0000
						ZREF 11.2500
						SCALE .0300

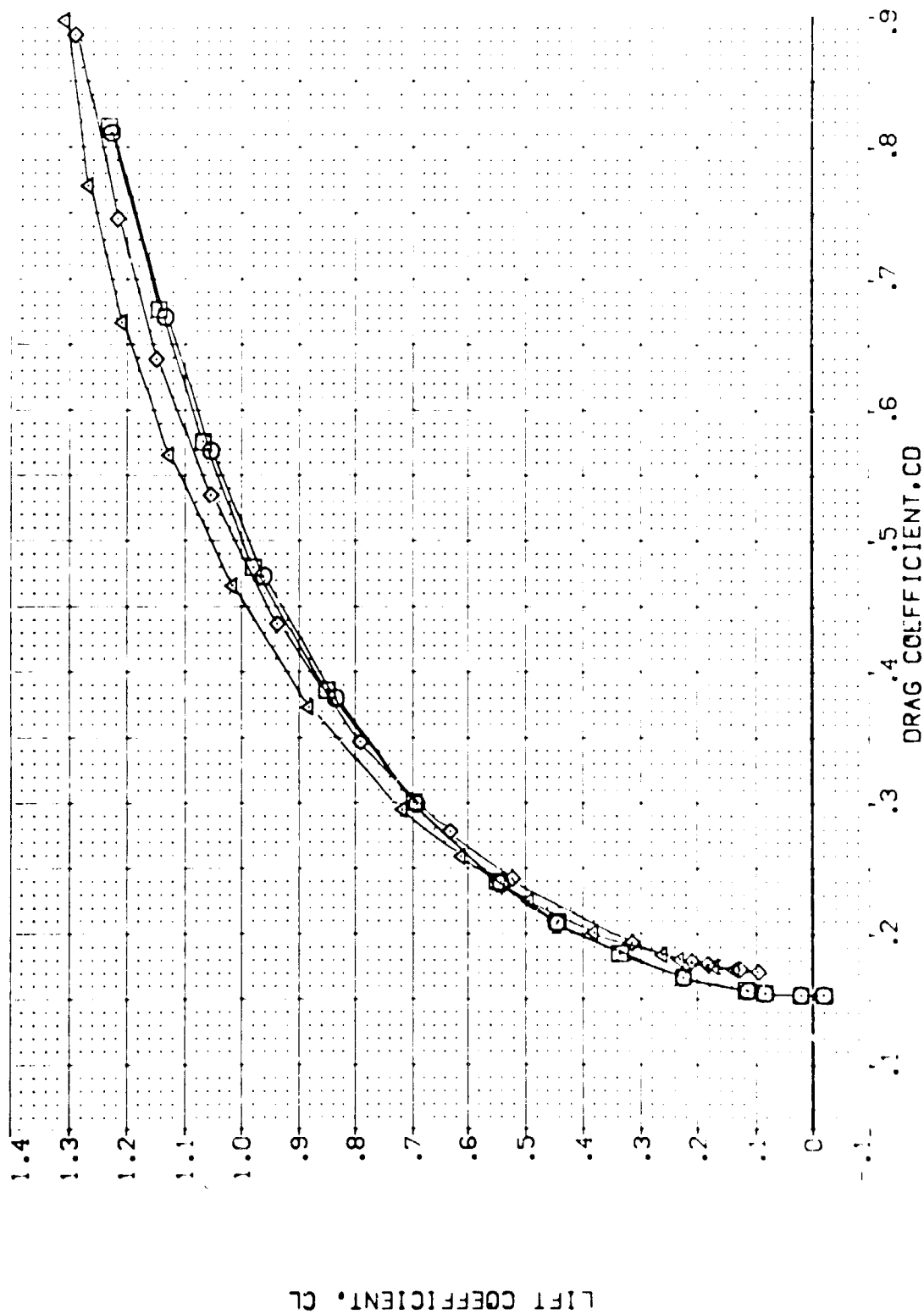


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(E)MACH = 1.20



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPOILER	REFERENCE INFORMATION
(TEJ010)	ARC 11-747 OAS3A B C H F V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(TEJ050)	ARC 11-747 OAS3A B C H F V	.000	.000	16.300	25.000	LREF 14.2440
(TEJ008)	ARC 11-747 OAS3A B C H F V	15.000	.000	16.300	25.000	BREF 28.000
(TEJ019)	ARC 11-747 OAS3A B C H F V	15.000	.000	16.300	25.000	YREF 32.300
						ZREF .0000
						SCALE 11.000
						SCALE 10.000

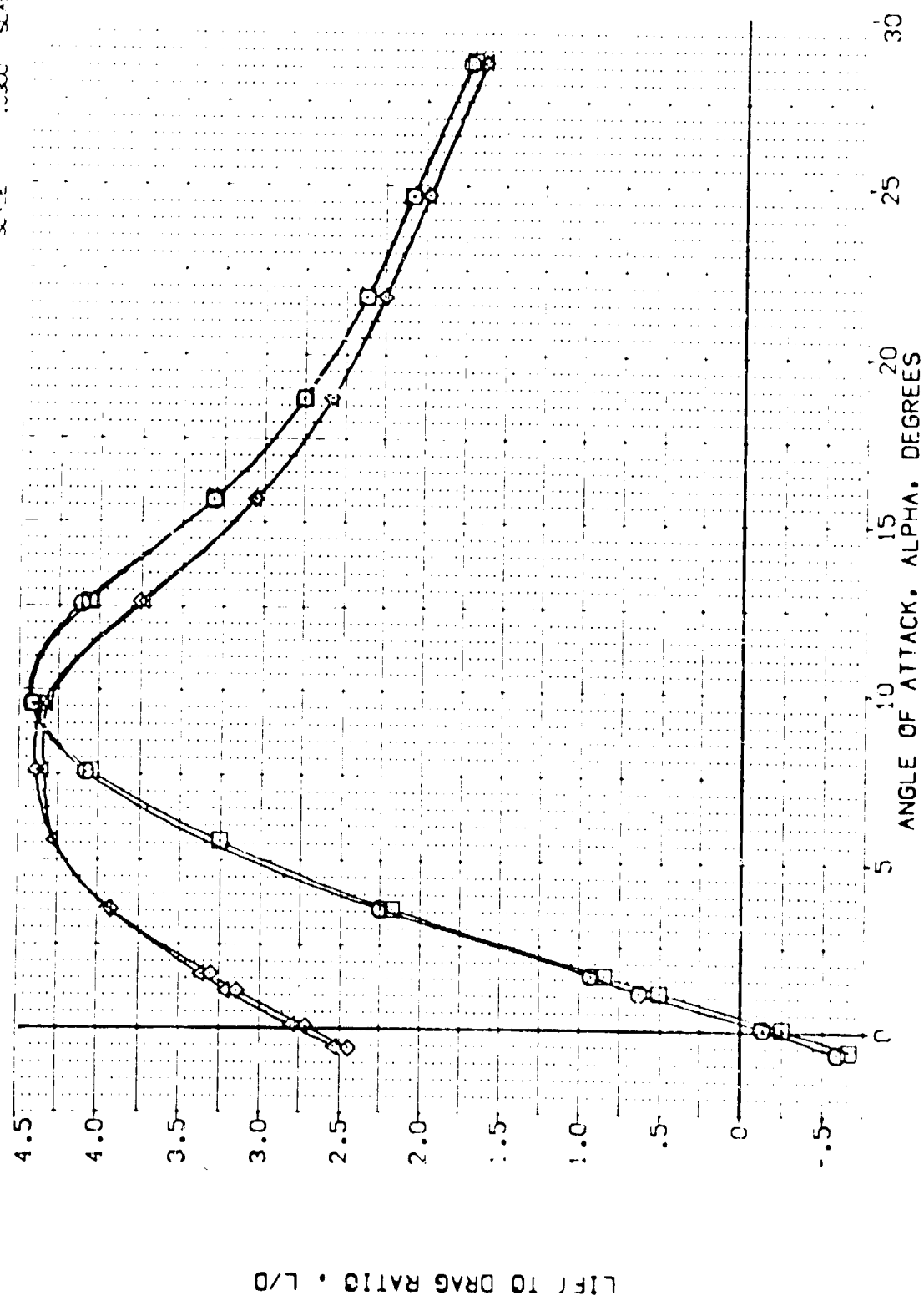


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(A) MACH .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NOM.	RV/L	SEAL. EL	ELEVON	AILERON	BOFLAP	SPDRBK	REFERENCE INFORMATION
[TEJ010]	ARC 11-747 D453A B C M F V1	V							SREF 2.4210 SQ. FT.
[TEJ050]	ARC 11-747 D453A B C M F V1	V							LREF 14.2440 IN.
[TEJ008]	ARC 11-747 D453A B C M F V1	V							BREF 28.1004 IN.
[TEJ019]	ARC 11-747 D453A B C M F V1	V							YMRP 32.3010 IN.
									ZMRP .0000 IN.
									SCALE 11.2500 IN.
									SCALE .0300

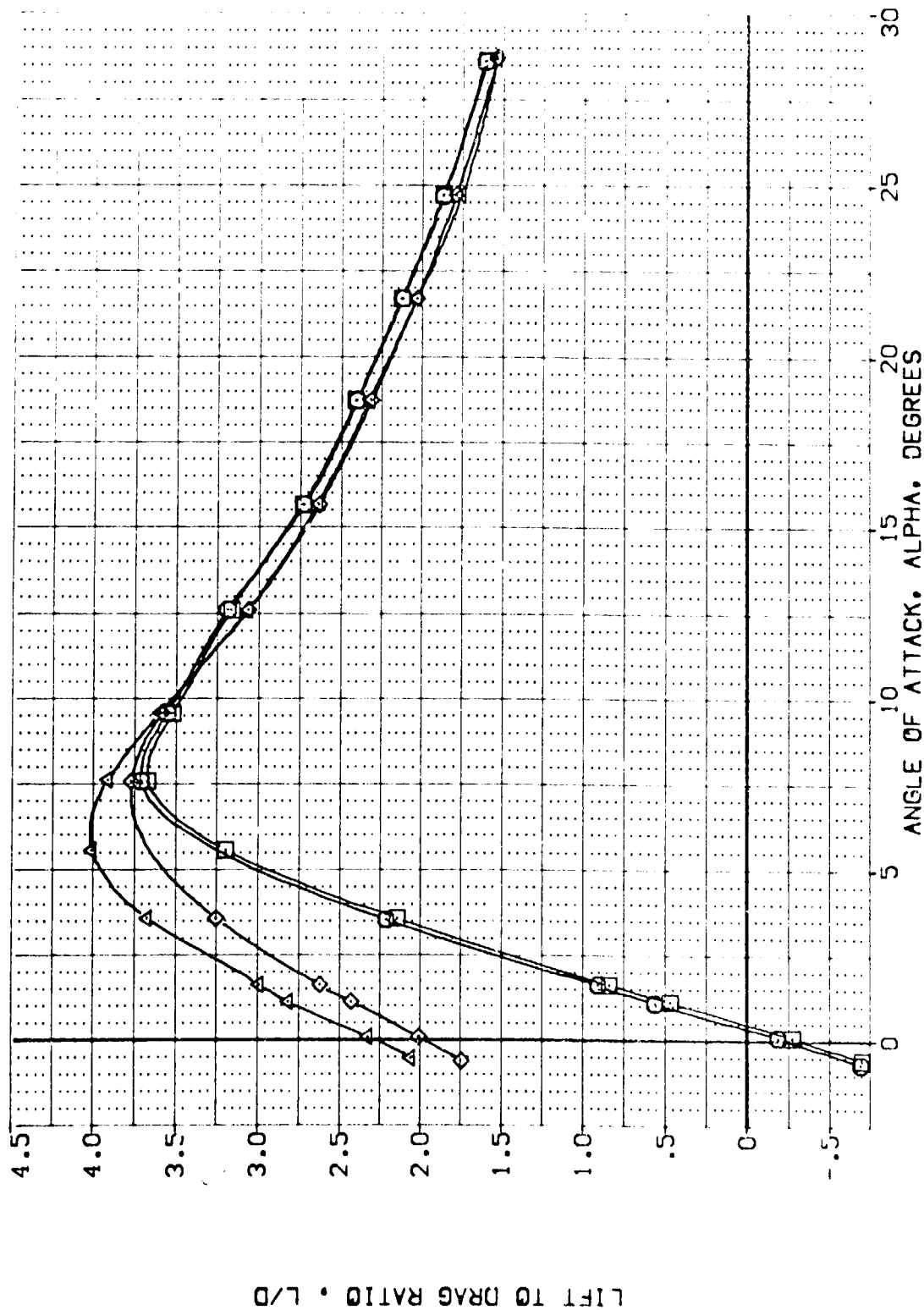


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(B)MACH = .80



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NOTES	RV/L	SEAL EL	ELEVON	AILRON	BOFLAP	SPOBRK	REFERENCE INFORMATION
(TEJ010)	ARC 11-747 DA53A B C M F VI	V			.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(TEJ050)	ARC 11-747 DA53A B C M F VI	V			.000	.000	16.300	25.000	LREF 14.2440 IN.
(TEJ008)	ARC 11-747 DA53A B C M F VI	V			15.000	.000	16.300	25.000	BREF 28.1004 IN.
(TEJ019)	ARC 11-747 DA53A B C M F VI	V			15.000	.000	16.300	25.000	XMRP 32.3010 IN.
									YMRP .0000 IN.
									ZMRP 11.2500 IN.
									SCALE .0300

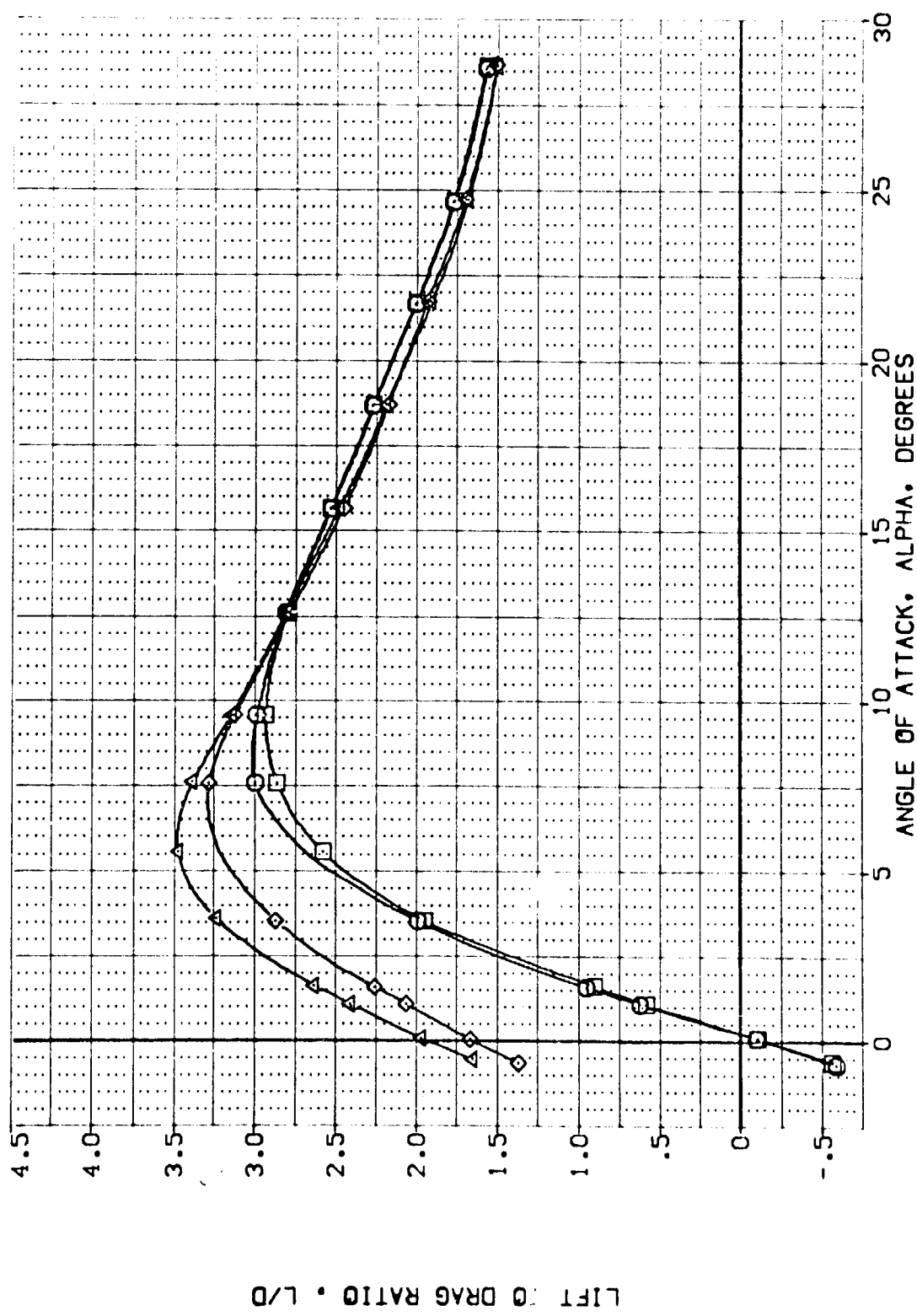


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(CJ)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NOI	RV/L	SEAL.EL	ELEVON	AIRLON	BD/LAP	SPDRBK	REFERENCE INFORMATION
[TEJ010]	ARC 11-747 OAS3A B C M F VI V	NOI	RV/L	SEAL.EL	.000	.000	15.300	25.000	SREF 2.4210 SQ.FT.
[TEJ050]	ARC 11-747 OAS3A B C M F VI V	NOI	RV/L	SEAL.EL	.000	.000	15.300	25.000	LREF 14.2440 IN.
[TEJ008]	ARC 11-747 OAS3A B C M F VI V	NOI	RV/L	SEAL.EL	15.000	.000	15.300	25.000	BREF 28.1004 IN.
[TEJ049]	ARC 11-747 OAS3A B C M F VI V	NOI	RV/L	SEAL.EL	15.000	.000	15.300	25.000	XMRP 32.3010 IN.
									YMRP .0000 IN.
									ZMRP 11.2500 IN.
									SCALE .0300

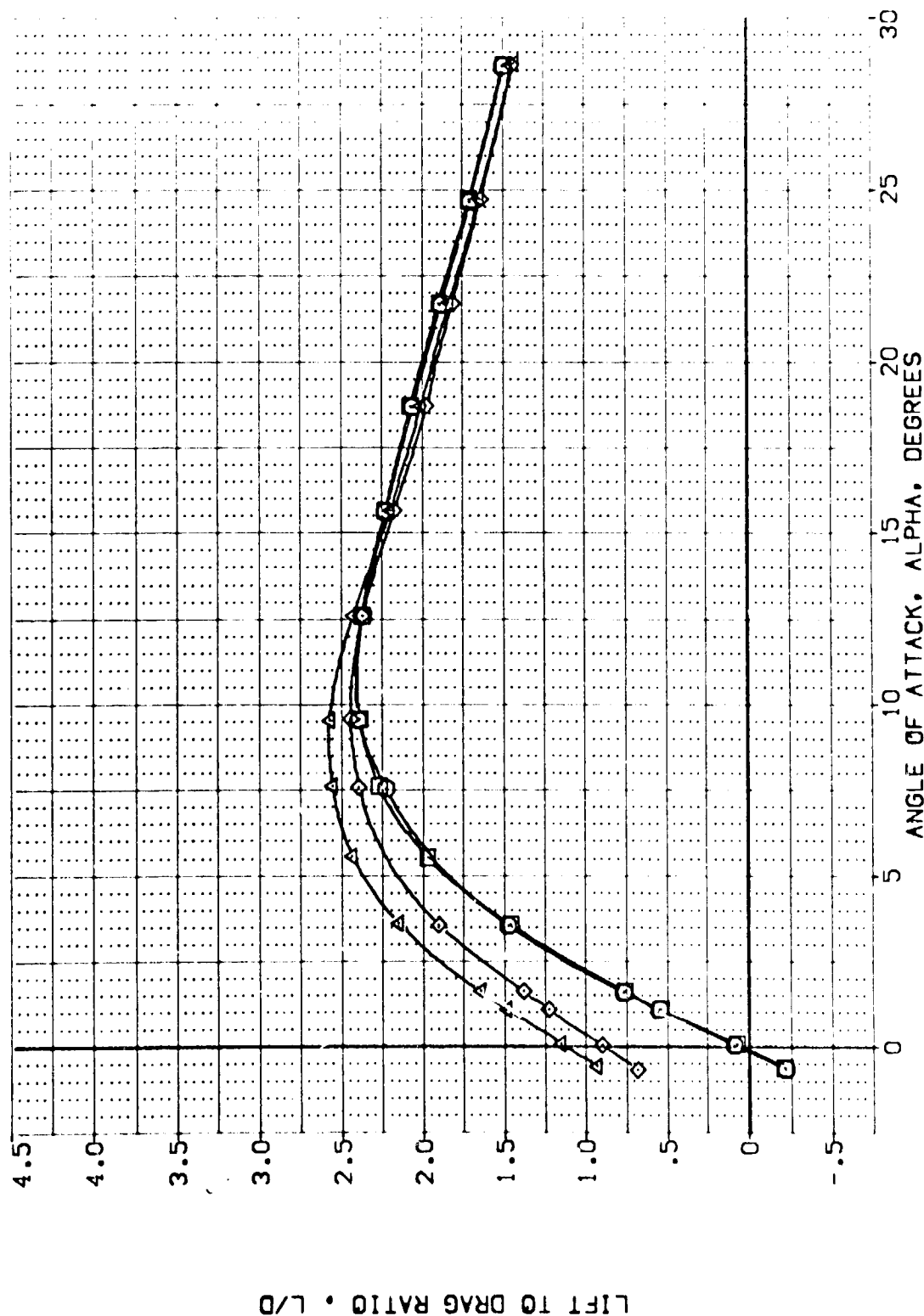


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(O)MACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NOM.	RV/L	SEAL.EL	ELEVON	AIRLON	BDF LAP	SPDBRK	REFERENCE INFORMATION
(TEJ010)	ARC 11-747 BA53A B C H F VI	V			.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(TEJ050)	ARC 11-747 BA53A B C H F VI	V			.000	.000	16.300	25.000	LREF 14.2440 IN.
(TEJ008)	ARC 11-747 BA53A B C H F VI	V			.000	.000	16.300	25.000	BREF 28.1004 IN.
(TEJ049)	ARC 11-747 BA53A B C H F VI	V			15.000	.000	16.300	25.000	YMRP 32.3010 IN.
					15.000	.000	16.300	25.000	ZMRP .0000 IN.
									SCALE 11.2500 IN.
									SCALE .0300

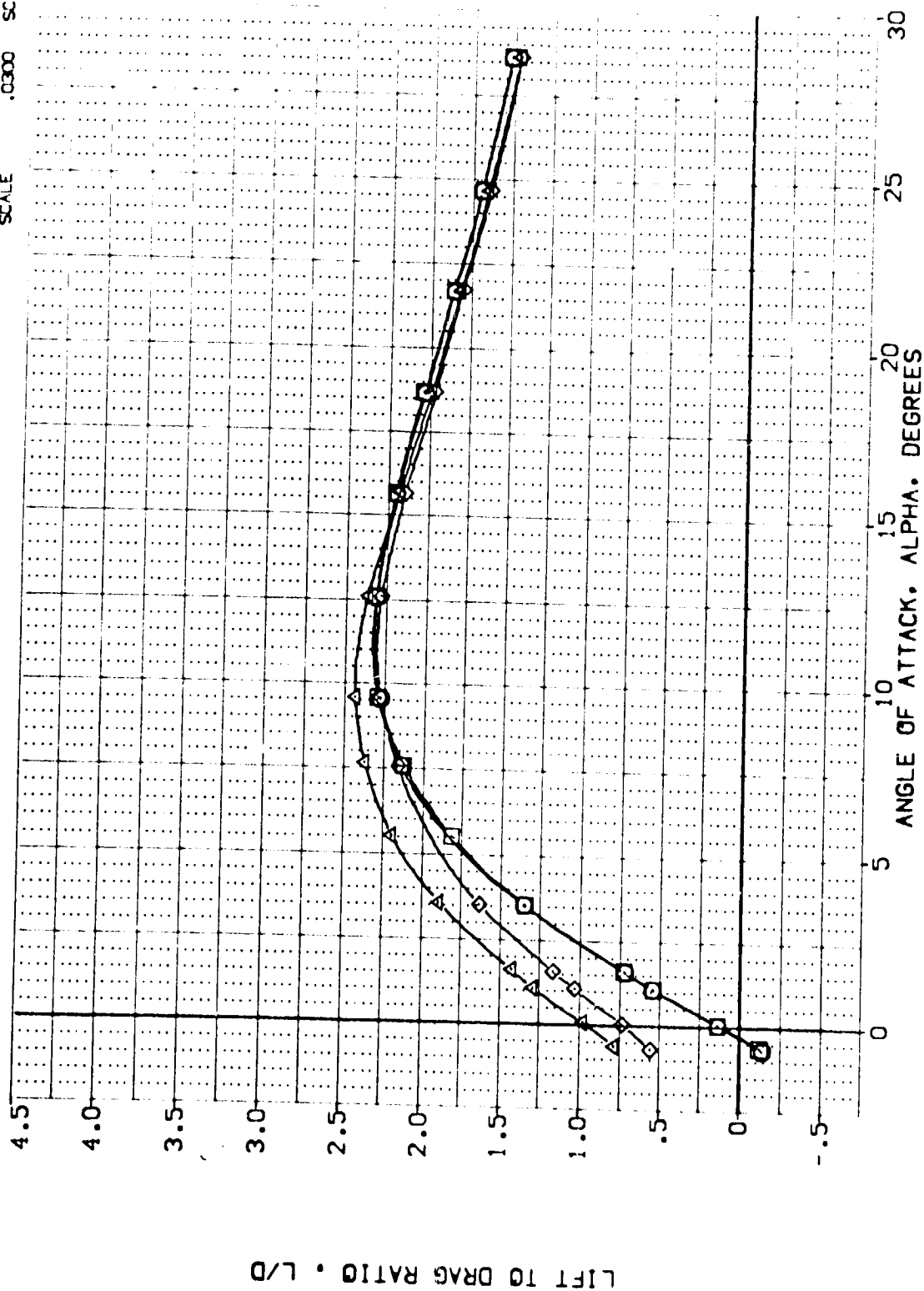


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(C/MACH = 1.20



DATA SET SYMBOL CONFIGURATION DESCRIPTION REFERENCE INFORMATION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	REF	IN.	SCALE
[AEJ010]	ARC 11-17 D433A B C M F VI	SREF	2.4210	50.FT.
[AEJ050]	ARC 11-17 D433A B C M F VI	LREF	14.2440	
[AEJ008]	ARC 11-17 D433A B C M F VI	BREF	28.1304	
[AEJ049]	ARC 11-17 D433A B C M F VI	XMRP	32.3010	
		YMRP	11.2500	
		ZMRP	11.2500	
		SCALE	.0300	

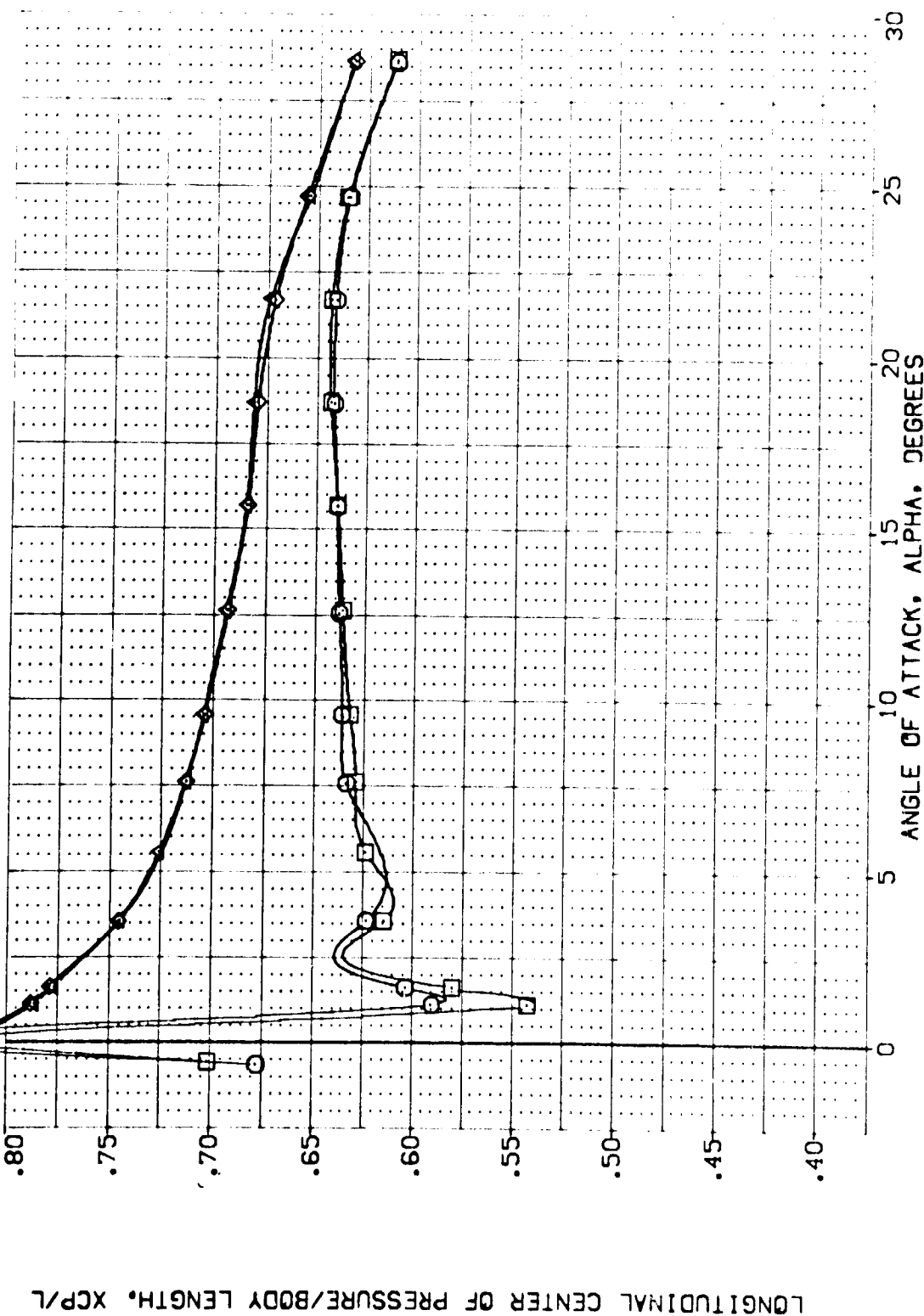


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(A)MACH = .60

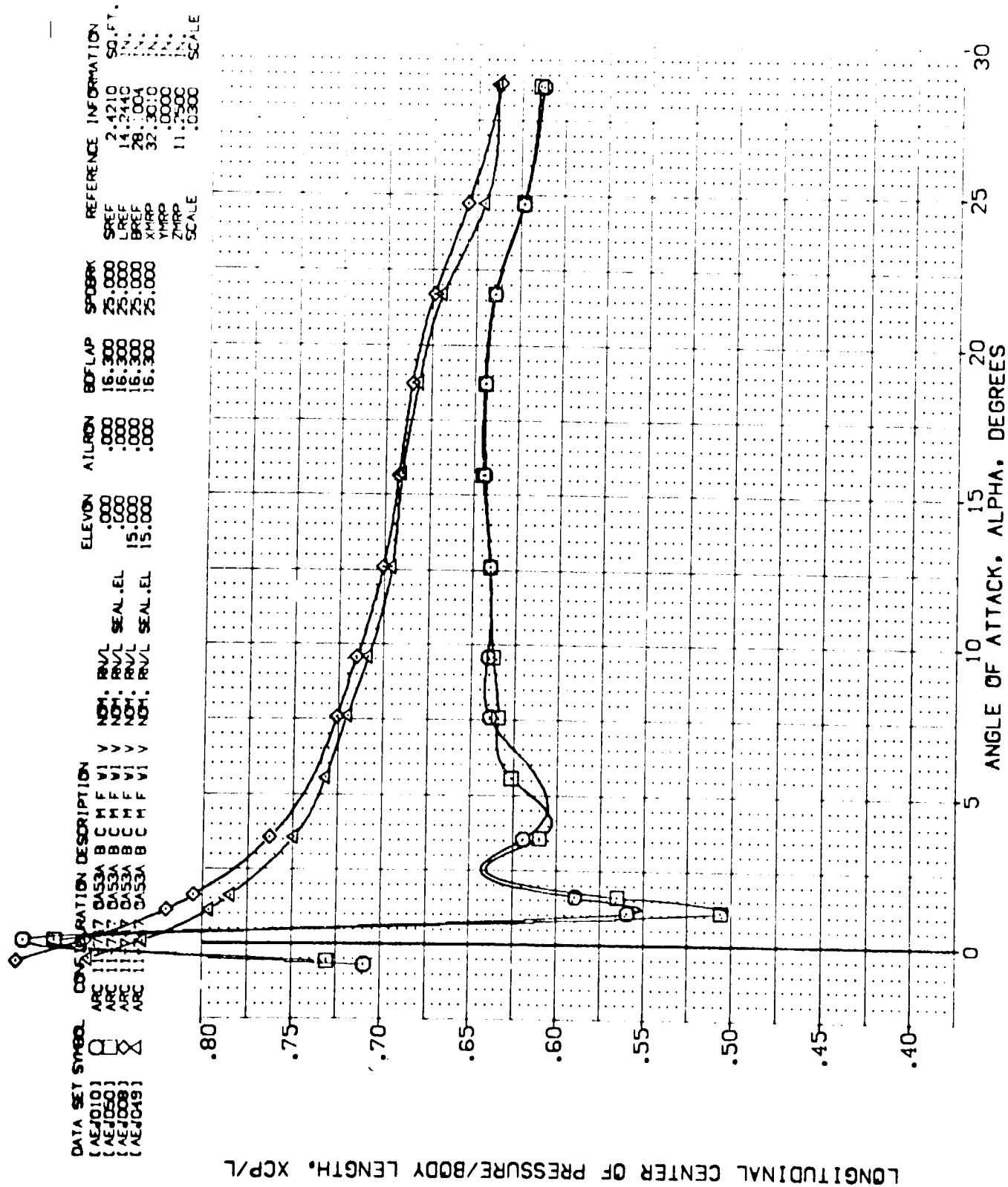


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(B)MACH = .80

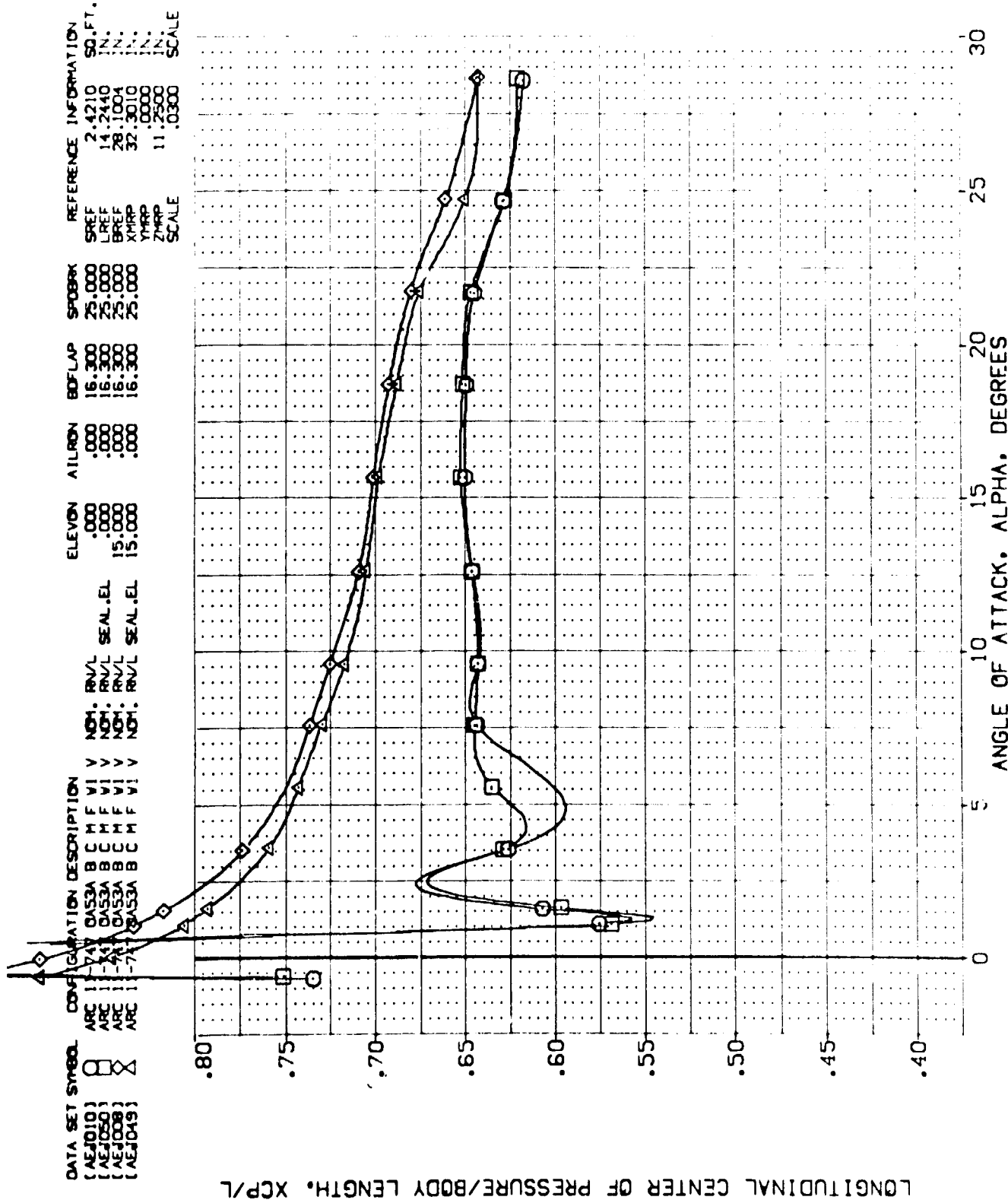


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(C)MACH = .90



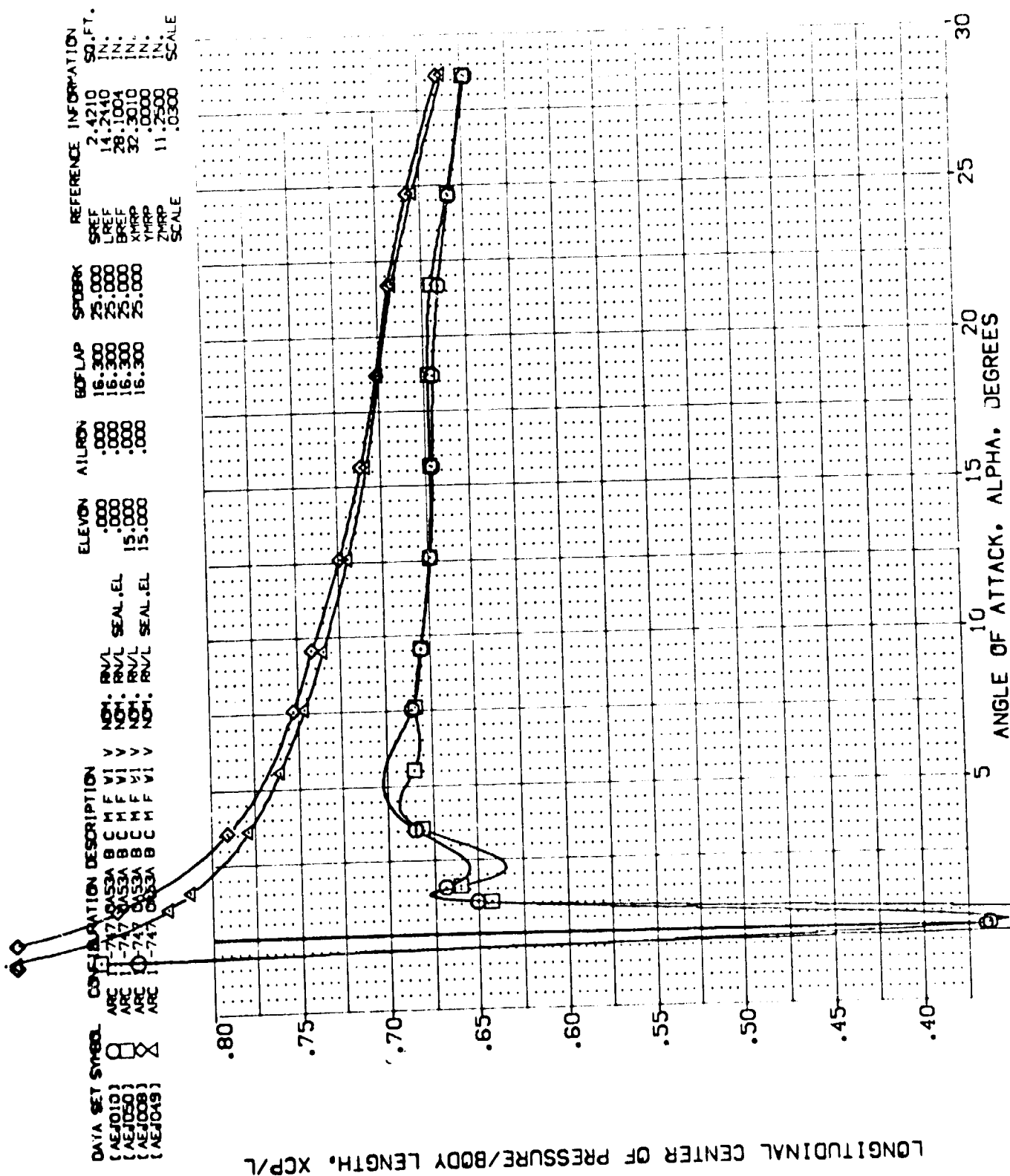


FIG 10 SEALED ELEVEN SPLIT EFFECTS

$$\text{COMACH} = 1.05$$



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NOM: RNVL	SEAL, EL	ELEVON	AIRLON	BOFLAP	SPDRBK	REFERENCE INFORMATION
[AEJ010]	ARC 11-747 0453A B C M F VI V	NOM: RNVL	SEAL, EL	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
[AEJ050]	ARC 11-747 0453A B C M F VI V	NOM: RNVL	SEAL, EL	.000	.000	16.300	25.000	LREF 14.2440 IN.
[AEJ008]	ARC 11-747 0453A B C M F VI V	NOM: RNVL	SEAL, EL	15.000	.000	16.300	25.000	BREF 28.1004 IN.
[AEJ049]	ARC 11-747 0453A B C M F VI V	NOM: RNVL	SEAL, EL	15.000	.000	16.300	25.000	YMRP 32.3010 IN.
								ZMRP 11.2500 IN.
								SCALE .0300 IN.

LONGITUDINAL CENTER OF PRESSURE/BODY LENGTH, XCP/L

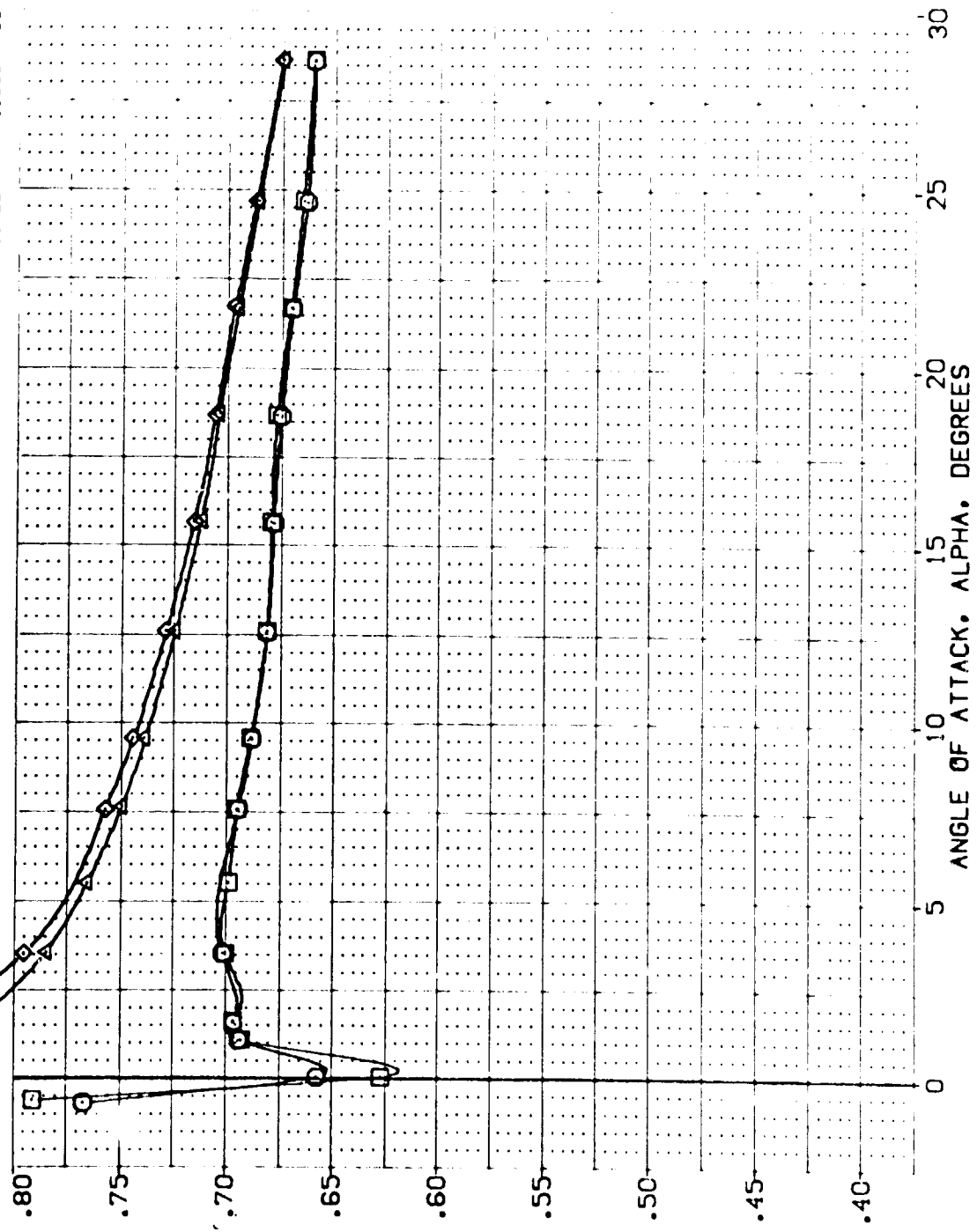


FIG. 10 SEALED ELEVON SPLIT EFFECTS

( $U_{MACH} = 1.20$ )

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPDRBK	REFERENCE INFORMATION
[VEJ050]	ARC 11-747 OAS3A B C M F V1 V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
[VEJ049]	ARC 11-747 OAS3A B C M F V1 V	15.000	.000	16.300	25.000	LREF 14.2440 IN.
						BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2300 IN.
						SCALE .0300

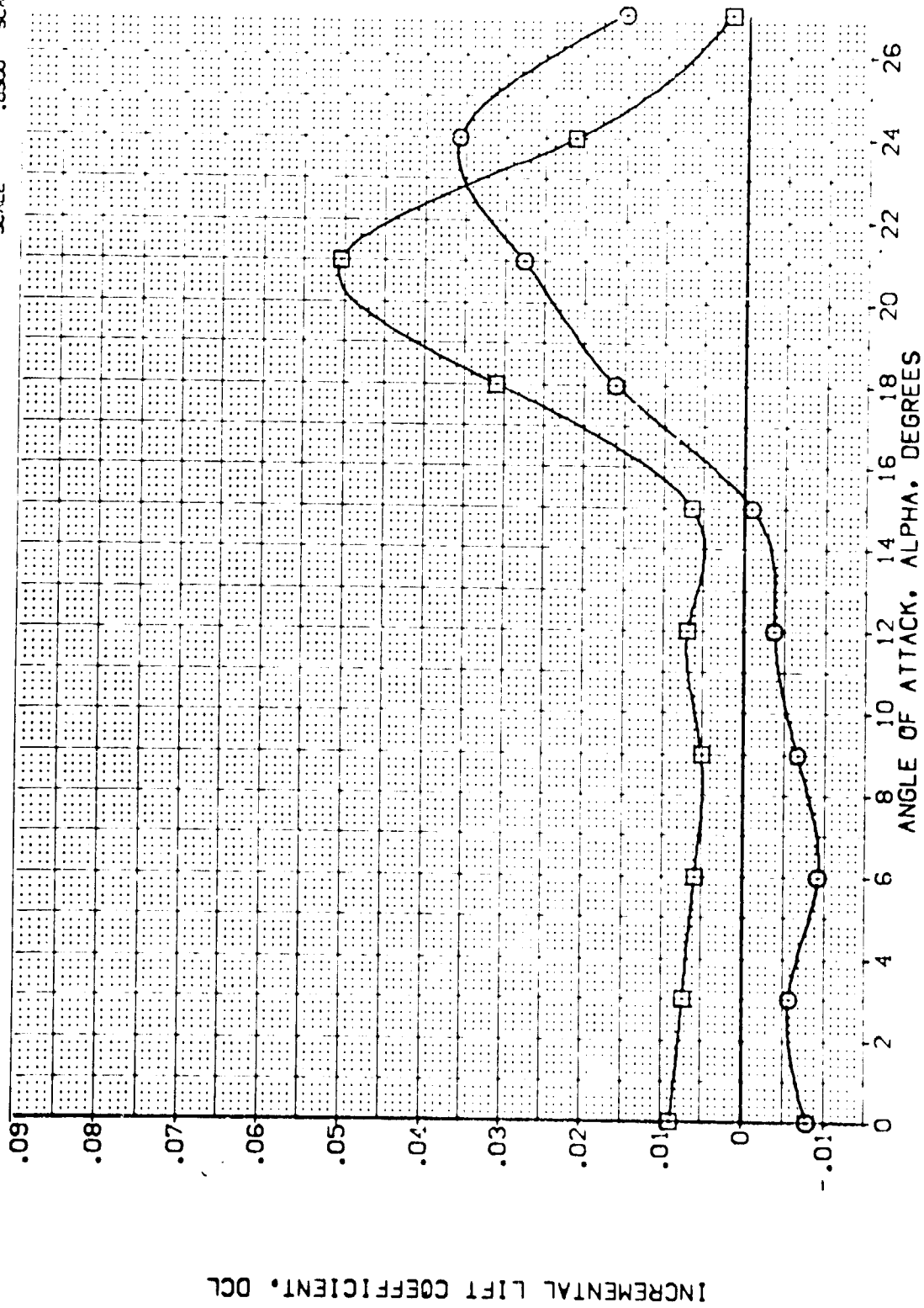


FIG. 10 SEALED ELEVON SPLIT EFFECTS

[A]MACH = .60



DATA SET SYMBOL: [VEJ050] [VEJ049]  
CONFIGURATION DESCRIPTION: ARC 11-747 0A53A B C H F VI V NOT: RUL SEAL:EL 15.000  
ELEVON: .000 AILRON: .000 BDFLAP: 16.300 16.300 SPOBRK: 25.000 25.000  
REFERENCE INFORMATION: SREF: 2.4210 SQ.FT. LREF: 14.2440 IN. BREF: 28.1004 IN. XMRP: 32.3010 IN. YMRP: .0000 IN. ZMRP: 11.2500 IN. SCALE: .0300

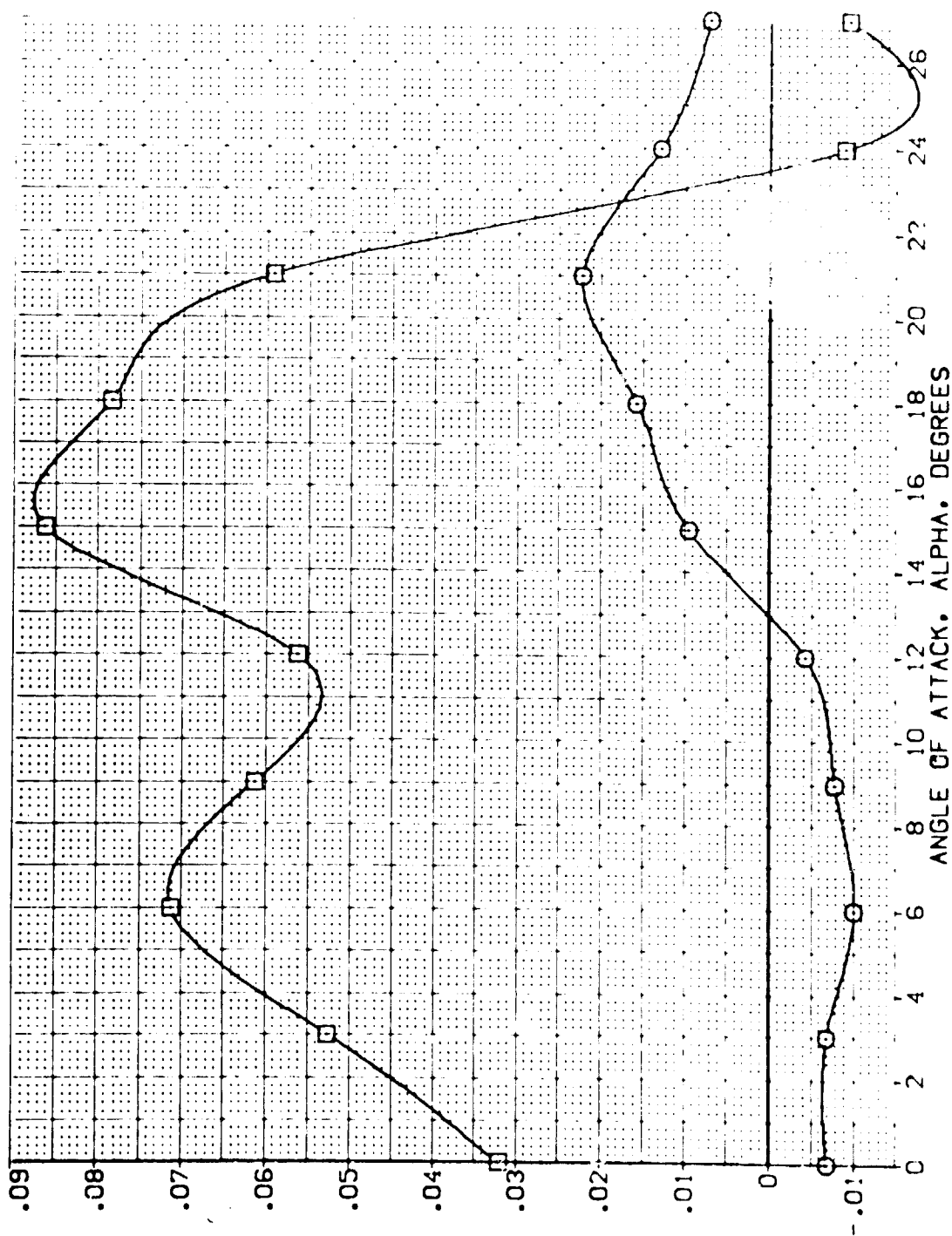


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(B)MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AIRLON	BOFLAP	SPOBRK	REFERENCE INFORMATION
(VEJ050)	ARC 11-747 BAS3A B C M F VI V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(VEJ049)	ARC 11-747 BAS3A B C M F VI V	15.000	.000	16.300	25.000	LREF 14.2440 IN.
						BREF 28.1004 IN.
						A-APP 32.3010 IN.
						VMPP .0000 IN.
						ZMPP 11.2500 IN.
						SCALE .0300

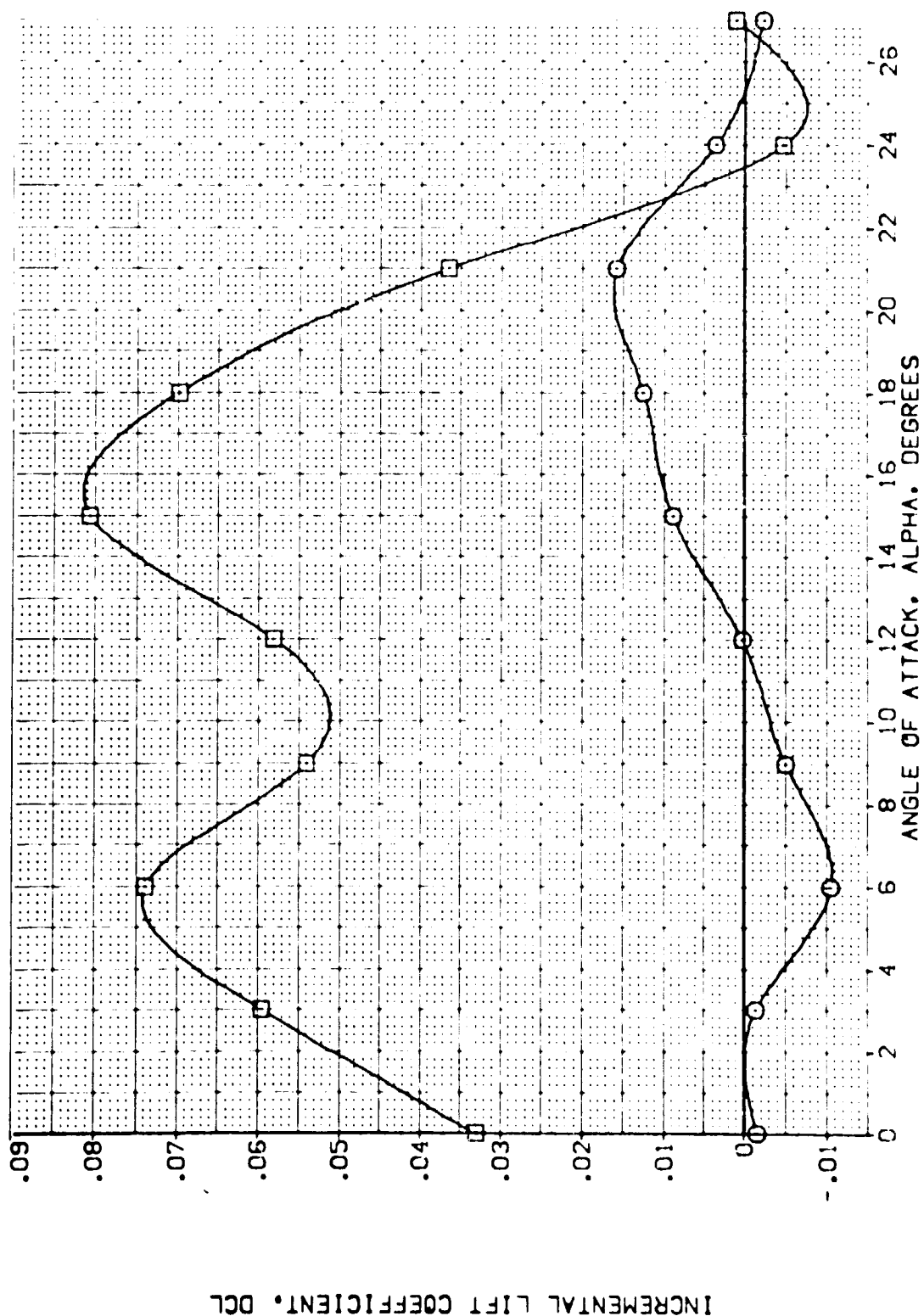


FIG. 10 SEALED ELEVON SPLIT EFFECTS

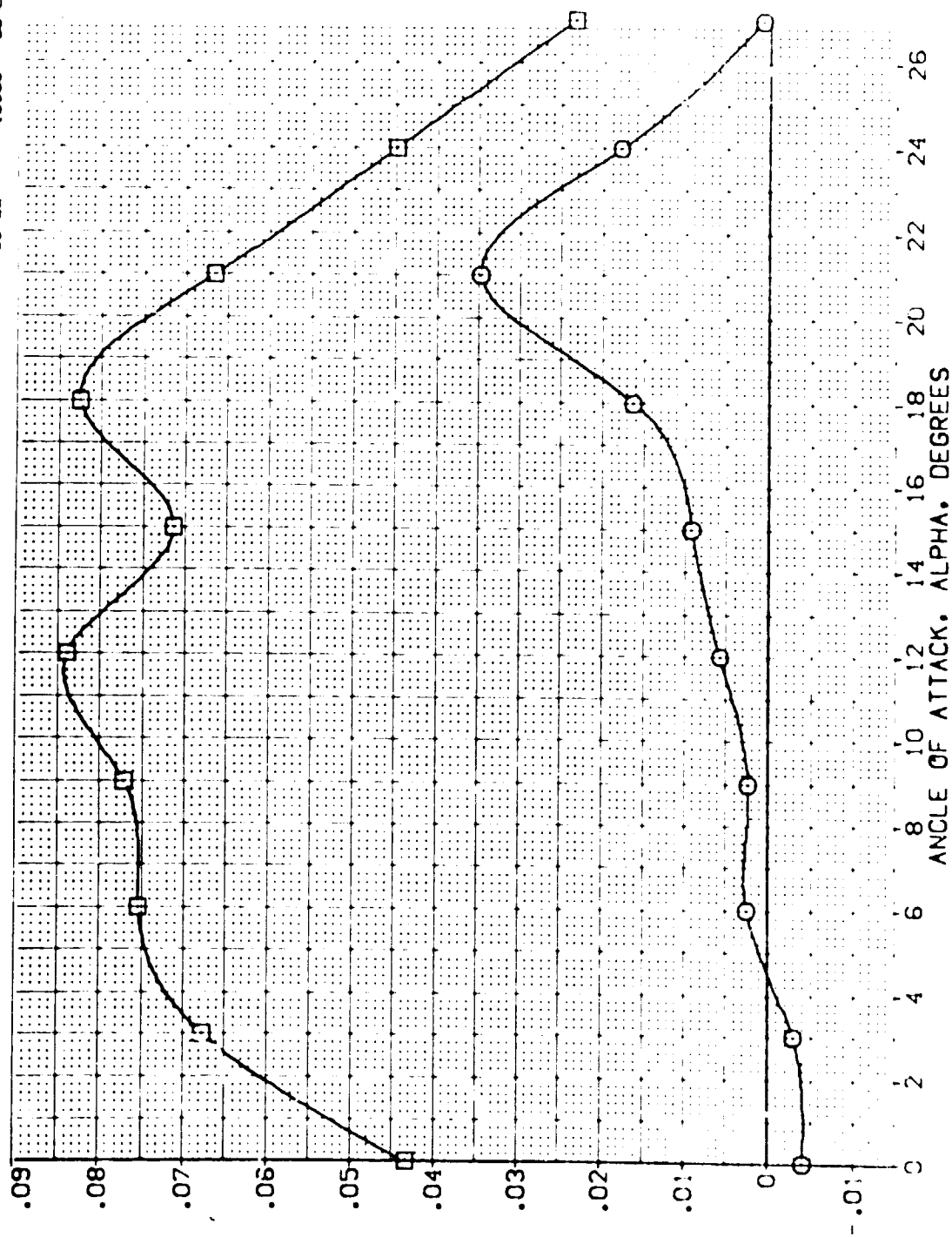
(C)MACH = .90



DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 (VEJ050) ARC 11-747 0A53A B C H F VI V  
 (VEJ049) ARC 11-747 0A53A B C H F VI V

ELEVON AIRLON BDF LAP SPOBOK  
 .000 .000 16.300 25.000  
 15.000 16.300 25.000

REFERENCE INFORMATION  
 SREF 2.4210 50. FT.  
 LREF 14.2440  
 BREF 28.1004  
 YMRP 32.3010  
 ZMRP .0000  
 SCALE 11.2500



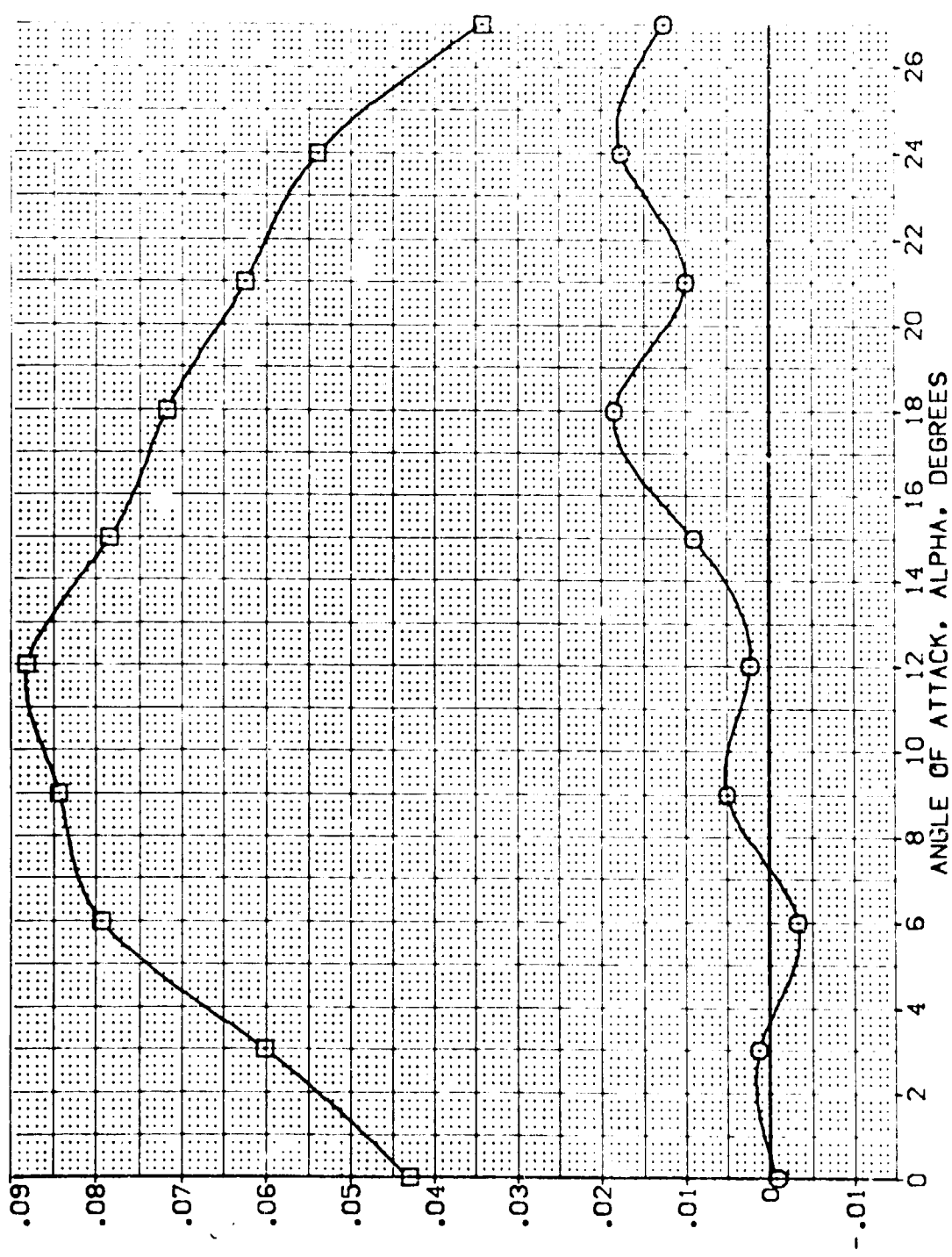
INCREMENTAL LIFT COEFFICIENT, DCL

FIG. 10 SEALED ELEVON SPLIT EFFECTS

COJMACH = 1.05



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPDRBK	REFERENCE INFORMATION
(VEJ050)	ARC 11-747 B453A B C M F V1 V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(VEJ049)	ARC 11-747 B453A B C M F V1 V	.000	.000	16.300	25.000	LREF 14.2440 IN.
						BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0030 IN.
						ZMRP 11.2500 IN.
						SCALE .0300



INCREMENTAL LIFT COEFFICIENT, DCL

FIG. 10 SEALED ELEVON SPLIT EFFECTS

(E)MACH = 1.20



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AIRLON	BD FLAP	SPDBRK	REFERENCE INFORMATION
{VEJ050}	ARC 11-747 OAS3A B C H F VI V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
{VEJ049}	ARC 11-747 OAS3A B C H F VI V	15.000	.000	16.300	25.000	LREF 14.2440 IN.
						BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

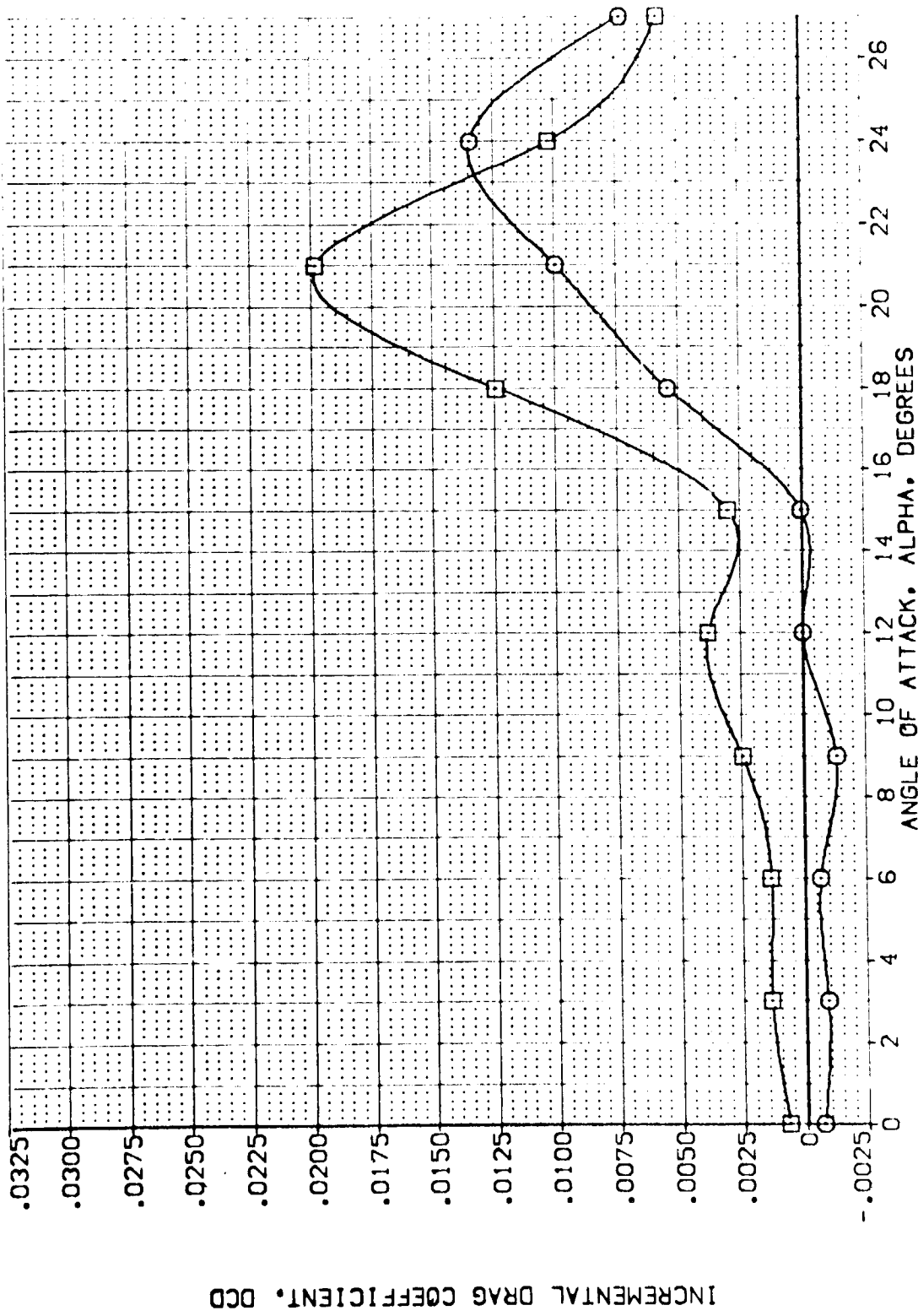


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(A) MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPOILER	REFERENCE INFORMATION
(VEJ050)	ARC 11-747 DA53A B C M F V1 V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(VEJ049)	ARC 11-747 DA53A B C M F V1 V	15.000	.000	16.300	25.000	LREF 14.2440 IN.
						BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

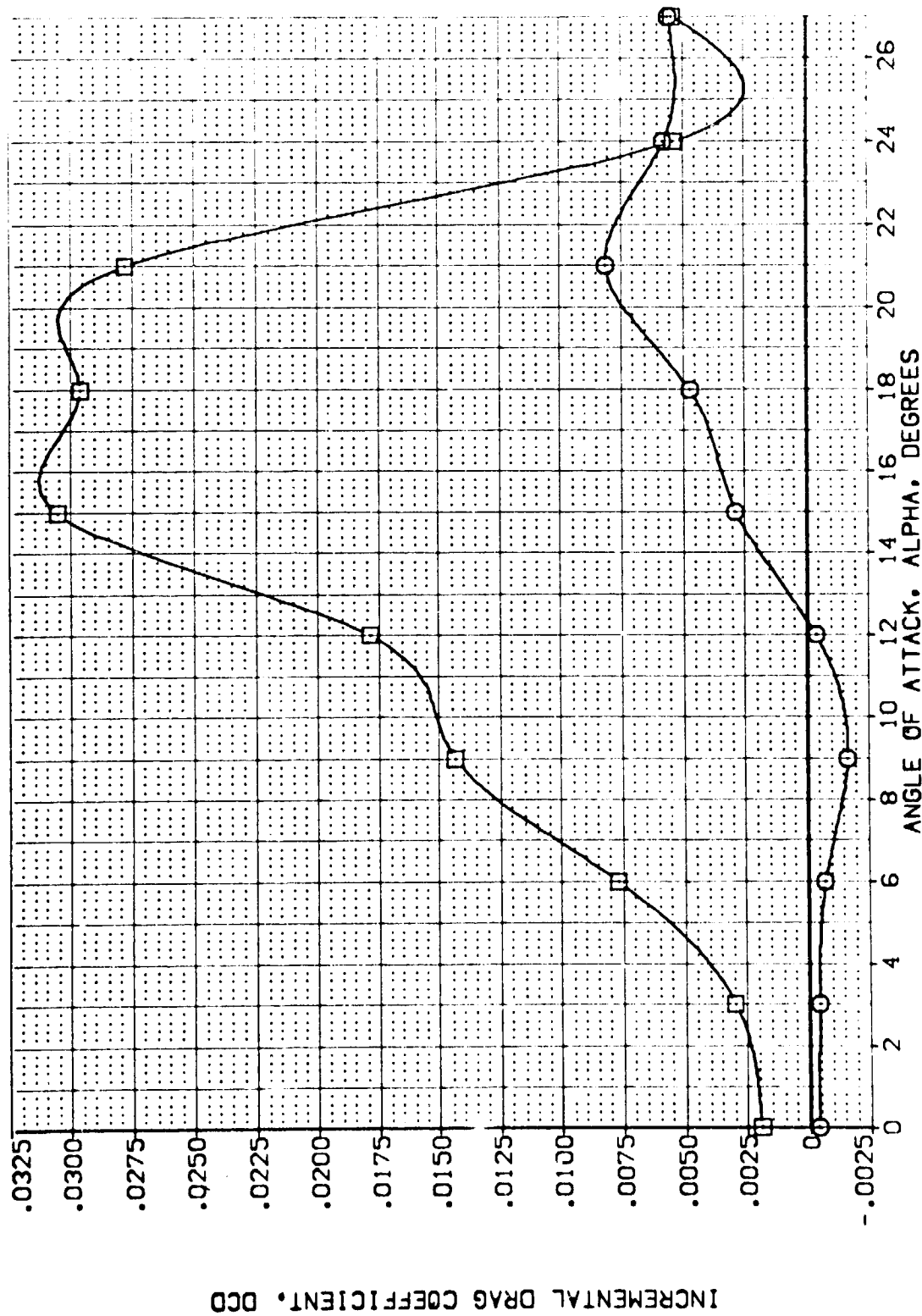


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(B)MACH = .80

DATA SET SYMBOL		CONFIGURATION DESCRIPTION		ELEVON		AIRLON		BOLAP		SPOROK		REFERENCE INFORMATION	
[VEJ050]	ARC 11-747	DA53A	B C M F VI V	NOM.	RVL SEAL EL	.000	.000	16.300	25.000	SREF	2.421C	50.11	
[VEJ049]	ARC 11-747	DA53A	B C M F VI V	NOM.	RVL SEAL EL	.000	.000	16.300	25.000	LREF	14.244C		
										BREF	28.100A		
										VMPP	32.301C		
										ZMPP	.000C		
										SCALE	11.250C		

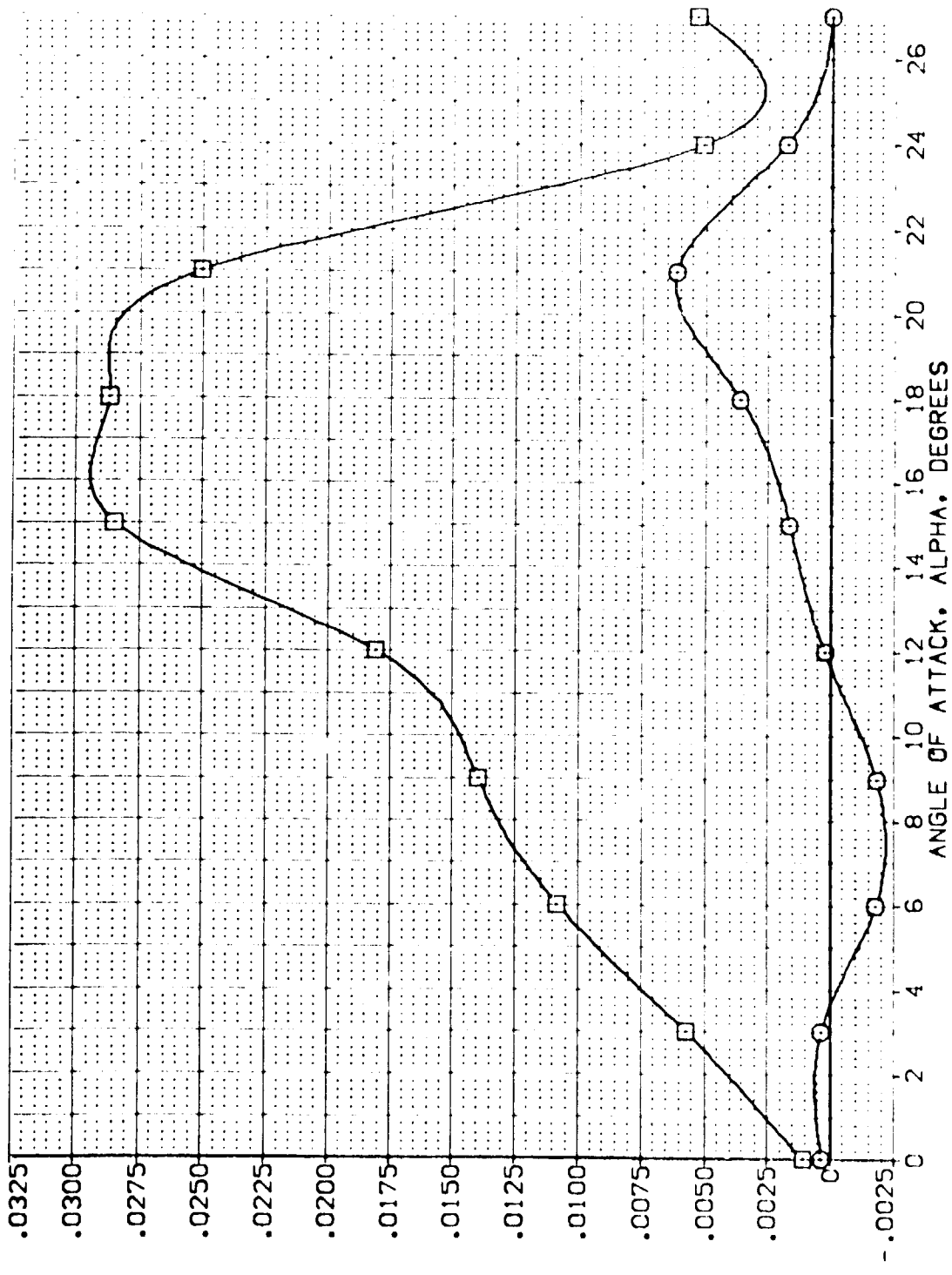


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(C)MACH = .90



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPDRBK	REFERENCE INFORMATION
(VEJ050)	ARC 11-747 BASSA B C M F VI V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(VEJ049)	ARC 11-747 BASSA B C M F VI V	15.000	.000	16.300	25.000	LREF 14.2440 IN.
						BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

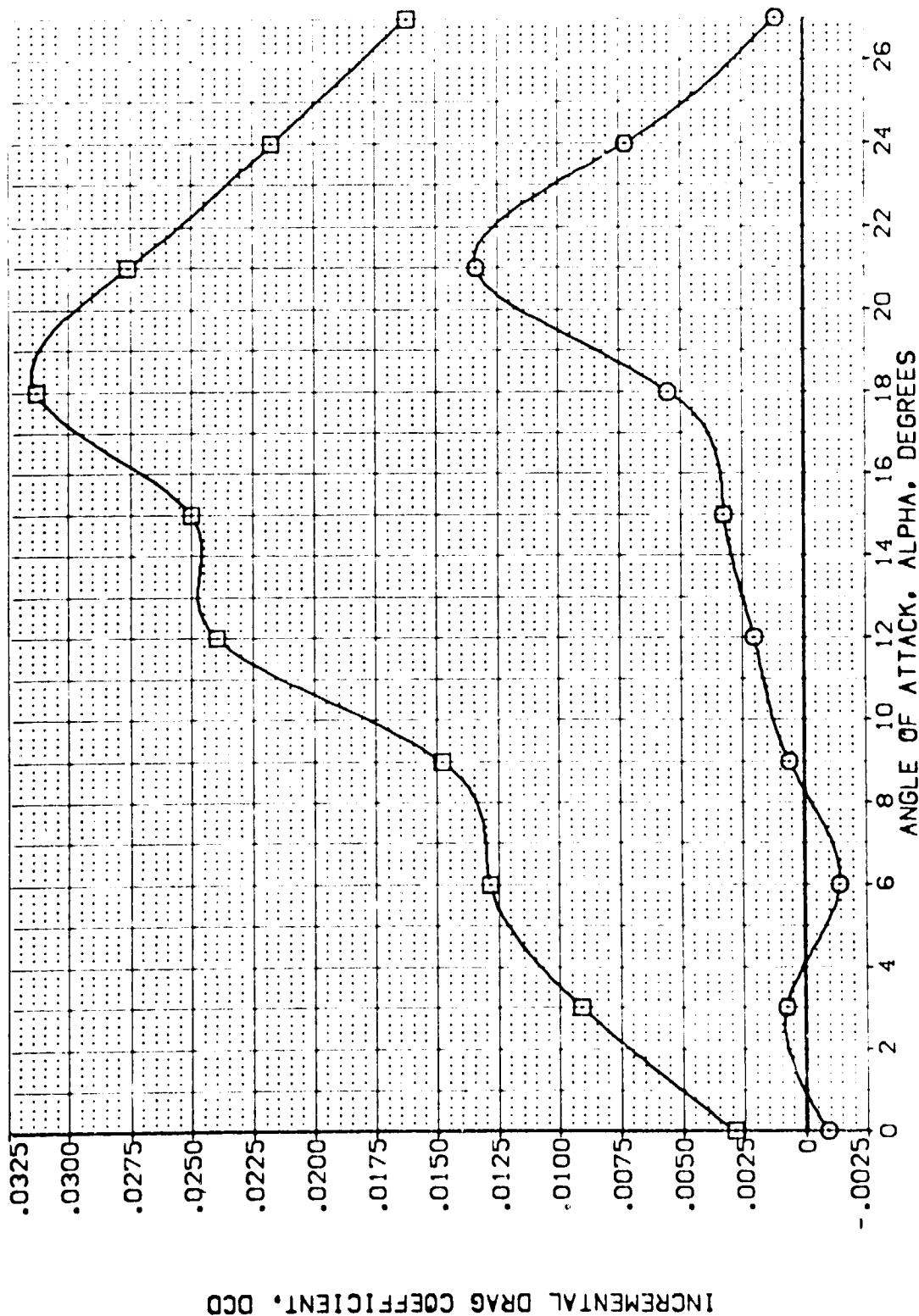


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(C)MACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPOILER	REFERENCE INFORMATION
(VEJ050)	ARC 11-747 OAS3A B C H F V1 V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(VEJ049)	ARC 11-747 OAS3A B C H F V1 V	.000	.000	16.300	25.000	LREF 14.2440 IN.
						BREF 28.1004 IN.
						XTRP 32.3010 IN.
						YTRP 11.0000 IN.
						ZTRP 11.2500 IN.
						SCALE .0300

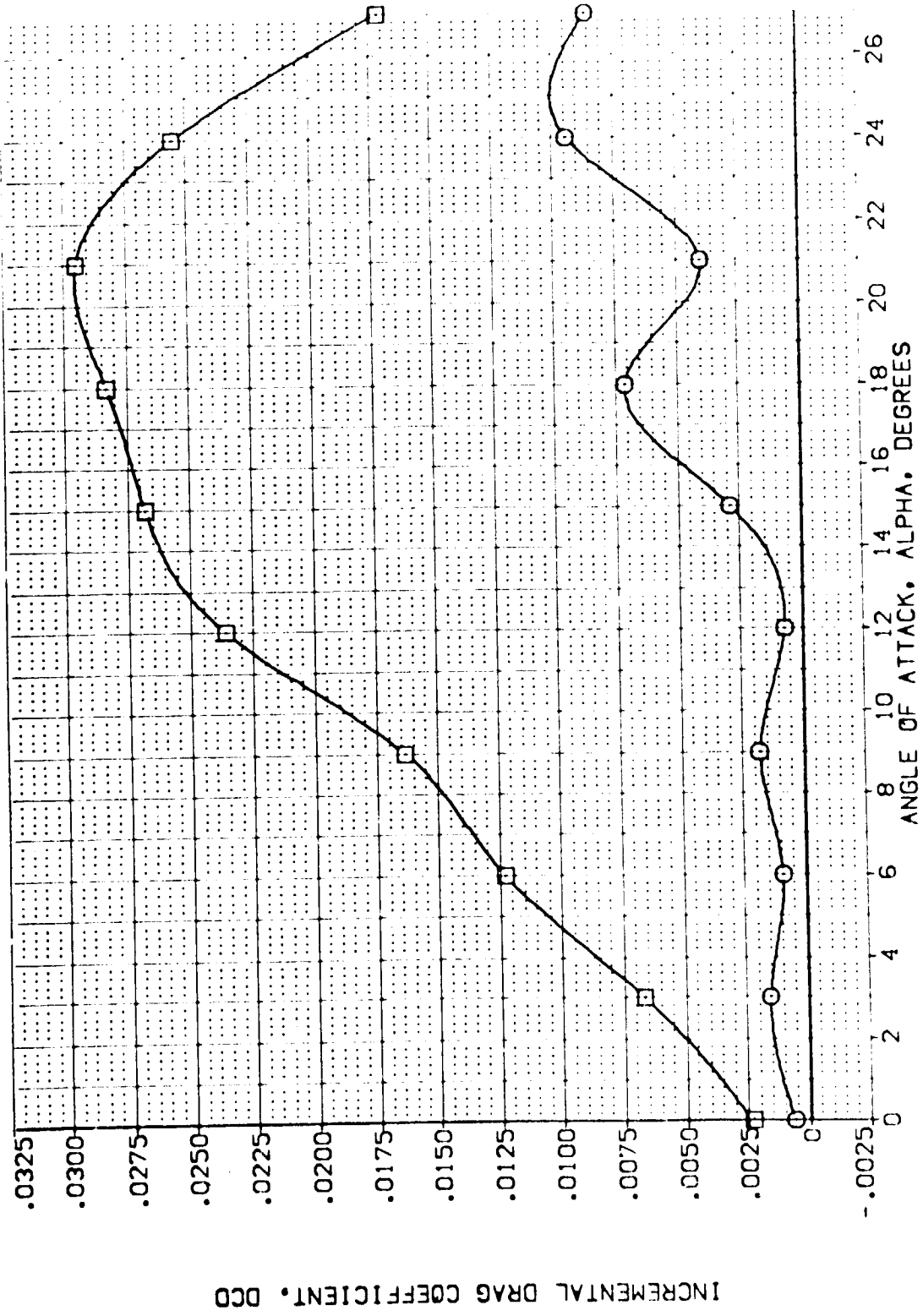


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(E)MACH = 1.20



DATA SET SYMBOL	CONFIGURATION	DESCRIPTION
(VEJ050)	ARC 11-747	CA53A B C M F VI V
(VEJ049)	ARC 11-747	CA53A B C M F VI V

NON: SEAL.EL  
NON: SEAL.EL

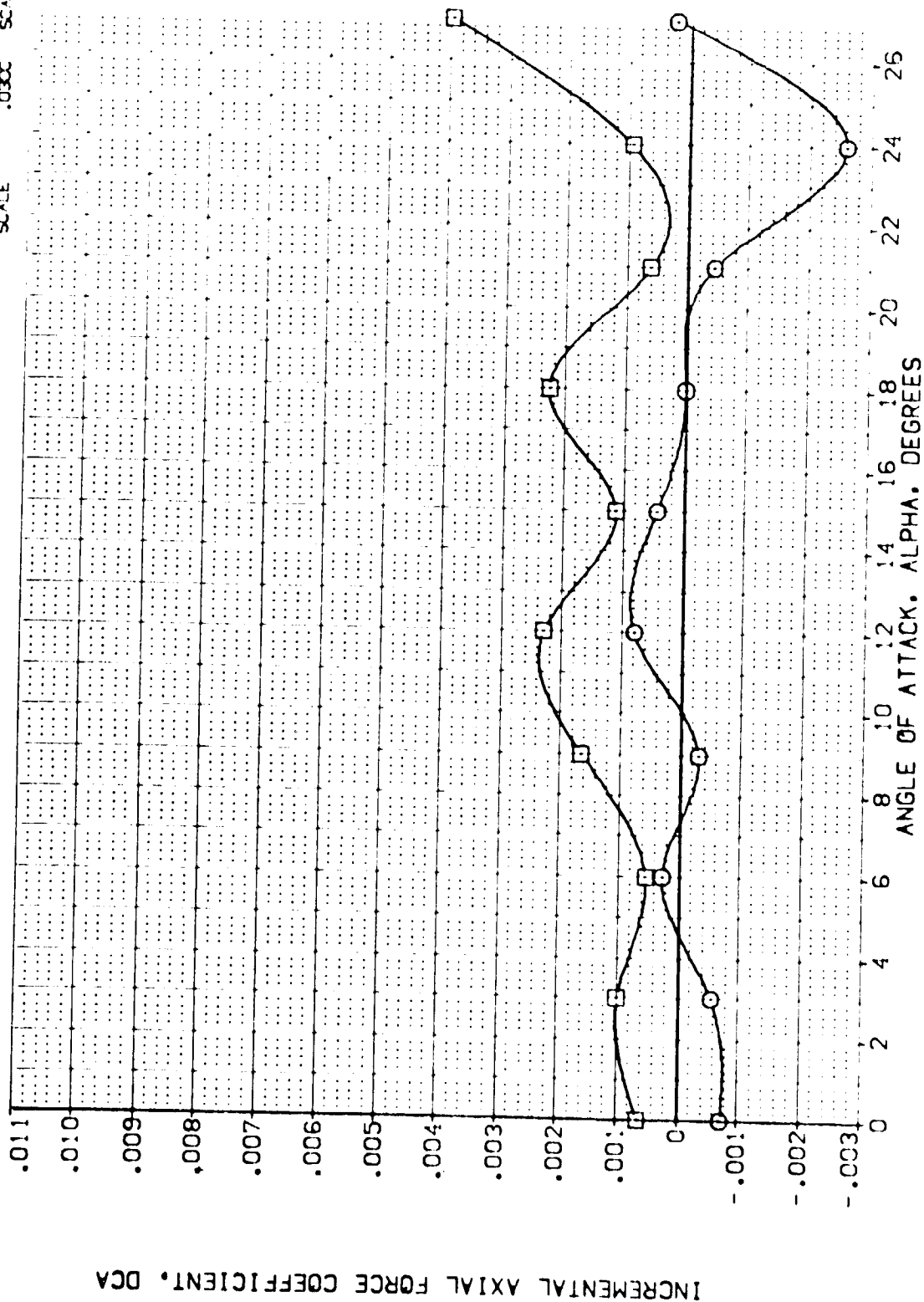
15,000  
ELEVEN

000000

END LAP  
16.300  
16.300

SP089X  
25.000  
25.000

REFERENCE INFORMATION	
SREF	2.4210 SQ. FT.
LREF	14.2440 IN.
BREF	28.1004 IN.
XMRP	32.3010 IN.
YMRP	.0000 IN.
ZMRP	11.7500 IN.
SCALE	.0300 SCALE







DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	BOFLAP	SPORBK	REFERENCE INFORMATION
(VEJ050)	ARC 11-747 OA53A B C M F V I V	.000	.000	16.300	25.000	SREF 2.4210 SC.FT.
(VEJ049)	ARC 11-747 OA53A B C M F V I V	.000	.000	16.300	25.000	LREF 14.2440
						BREF 28.1004
						YMRP 32.3010
						ZMRP .0000
						SCALE 11.7500
						SCALE

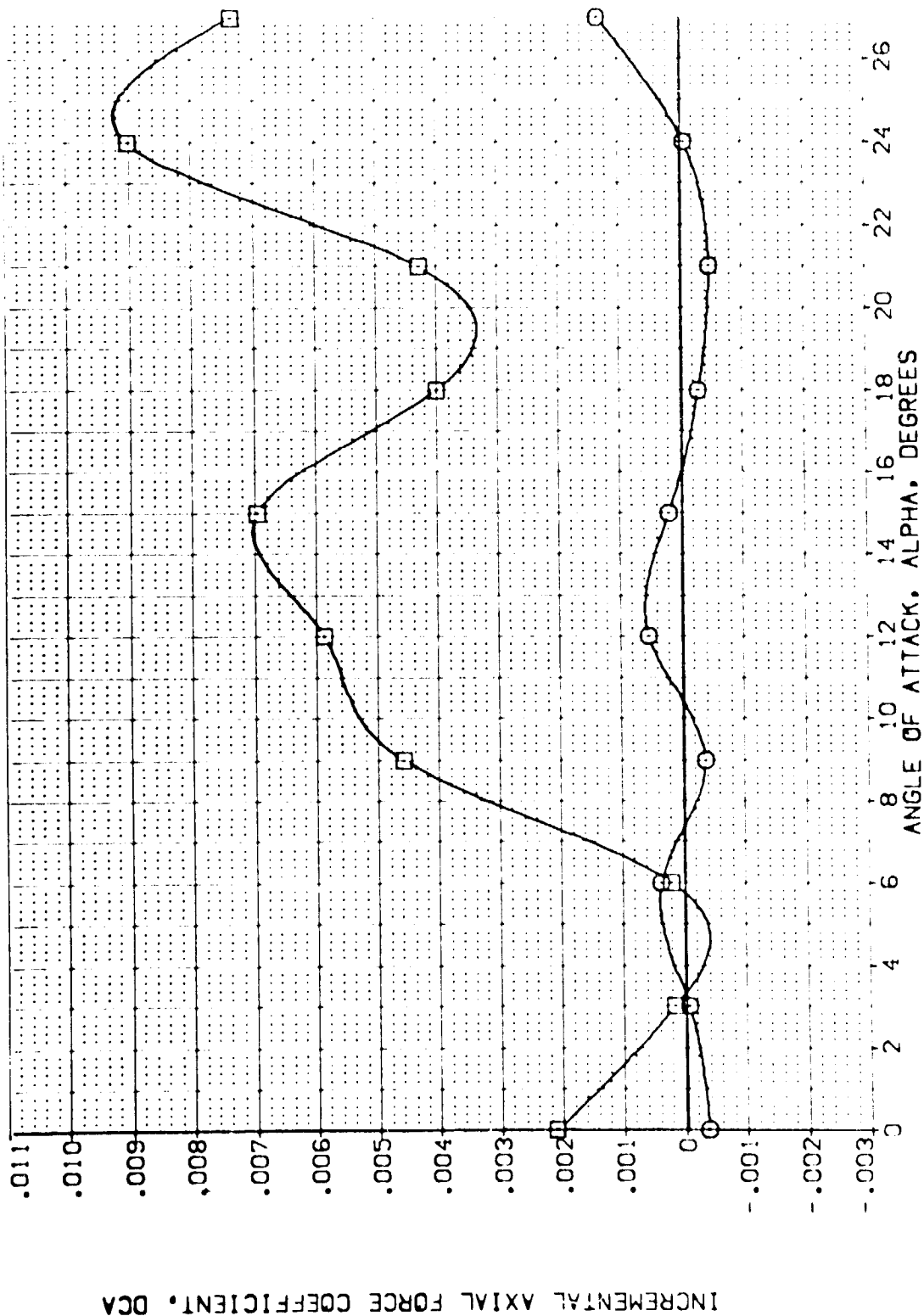


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(B)MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPOILER	REFERENCE INFORMATION
(VEJ050)	ARC 11-747 0A53A B C H F VI	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(VEJ049)	ARC 11-747 0A53A B C H F VI	15.000	.000	16.300	25.000	LREF 14.2410 IN.
						BREF 28.1004 IN.
						YMRP 32.3010 IN.
						ZMRP .0000 IN.
						SCALE 11.2500 IN.
						SCALE .0300

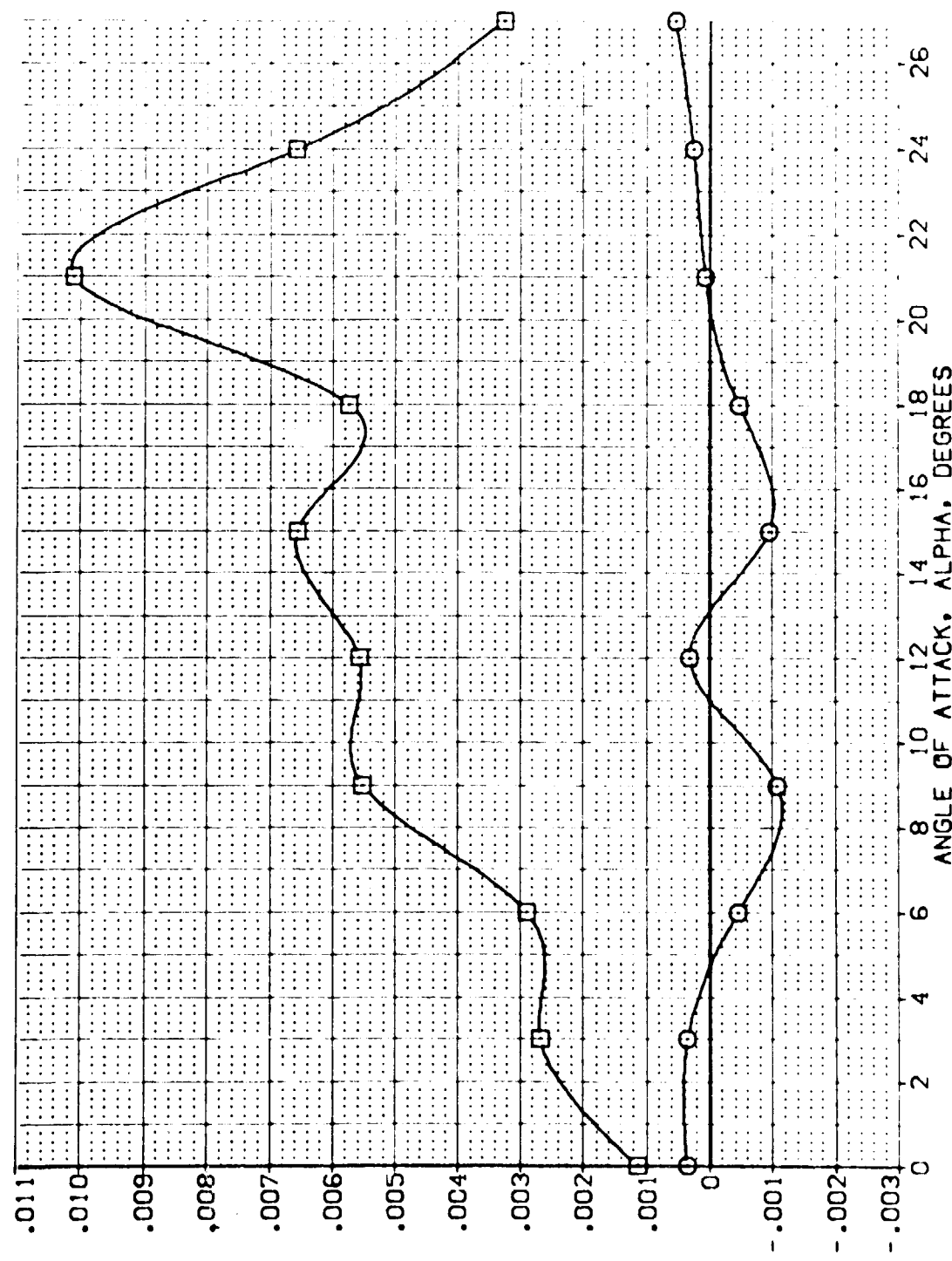


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(C)MACH = .90



DATA SET SYMBOL CONFIGURATION DESCRIPTION REFERENCE INFORMATION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	REFERENCE INFORMATION
(VEJ050)	ARC 11-747 CAS3A B C H F V	SREF 2.4210 SQ.FT.
(VEJ049)	ARC 11-747 CAS3A B C H F V	LREF 14.2440 IN.
		BREF 28.1004 IN.
		XMRP 32.3010 IN.
		YMRP .0000 IN.
		ZMRP 11.2500 IN.
		SCALE .0300 SCALE

ELEVON AILRON BDF LAP SPOBRK

ELEVON	AILRON	BDF LAP	SPOBRK
.000	.000	16.300	25.000
15.000	.000	16.300	25.000

NON: RNAL SEAL:EL NON: RNAL SEAL:EL

NON: RNAL SEAL:EL	NON: RNAL SEAL:EL
.000	.000
15.000	.000

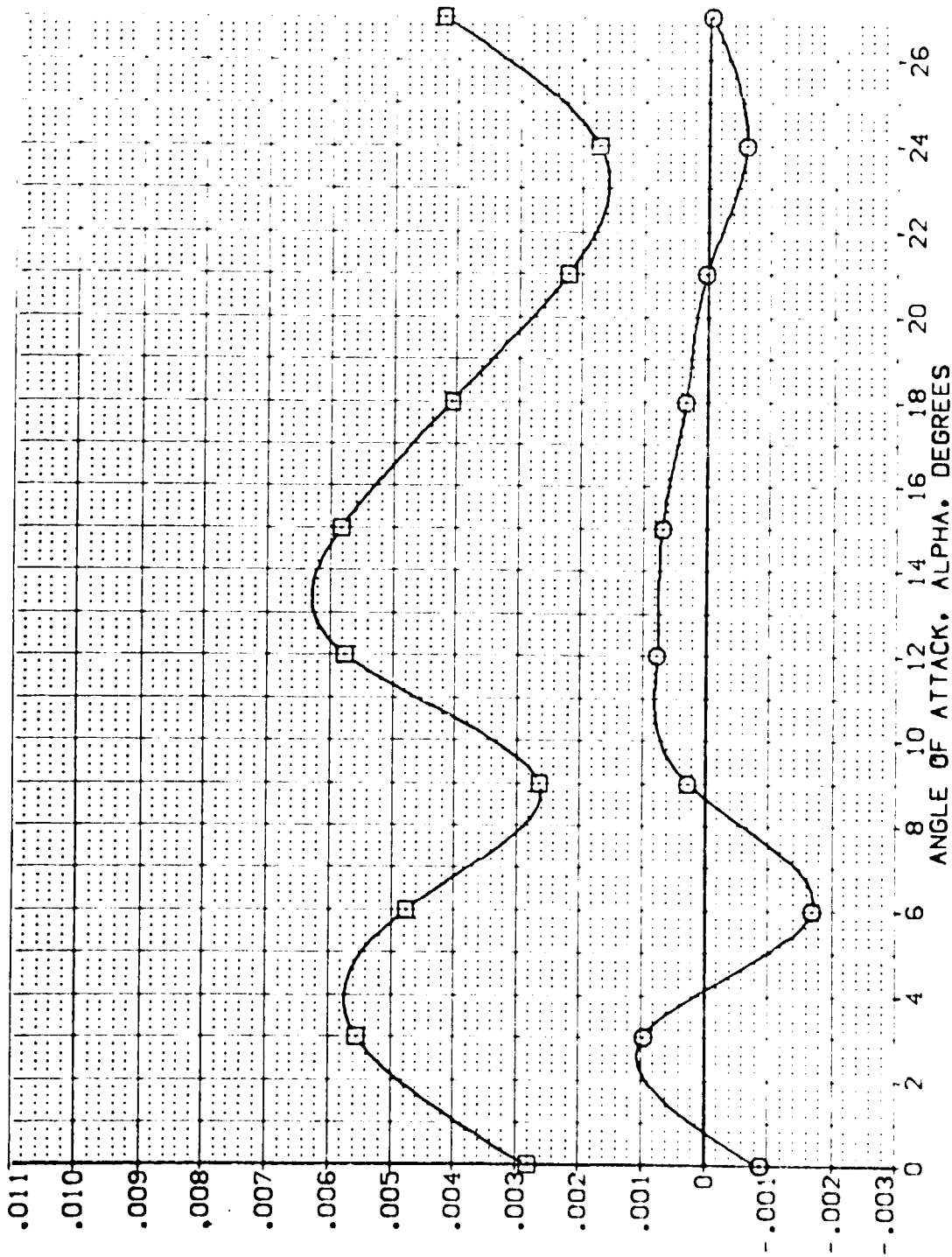


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(C)MACH = 1.05

DATA SET SYMBOL: **B** CONFIGURATION DESCRIPTION: ARC 11-747 OAS3A B C M F V1 V NOM: RNVL SEAL.EL 15.000 ELEVON: .000 AILRON: .000 BOFLAP: 16.300 SPOBRK: 25.000 25.000  
 (VEJ050) (VEJ049) ARC 11-747 OAS3A B C M F V1 V NOM: RNVL SEAL.EL 15.000 ELEVON: .000 AILRON: .000 BOFLAP: 16.300 SPOBRK: 25.000 25.000  
 REFERENCE INFORMATION: SREF: 2.4210 SQ.FT. LREF: 14.2440 IN. BREF: 28.1004 IN. XMRP: 32.3010 IN. YMRP: .0000 IN. ZMRP: 11.2500 IN. SCALE: .0300

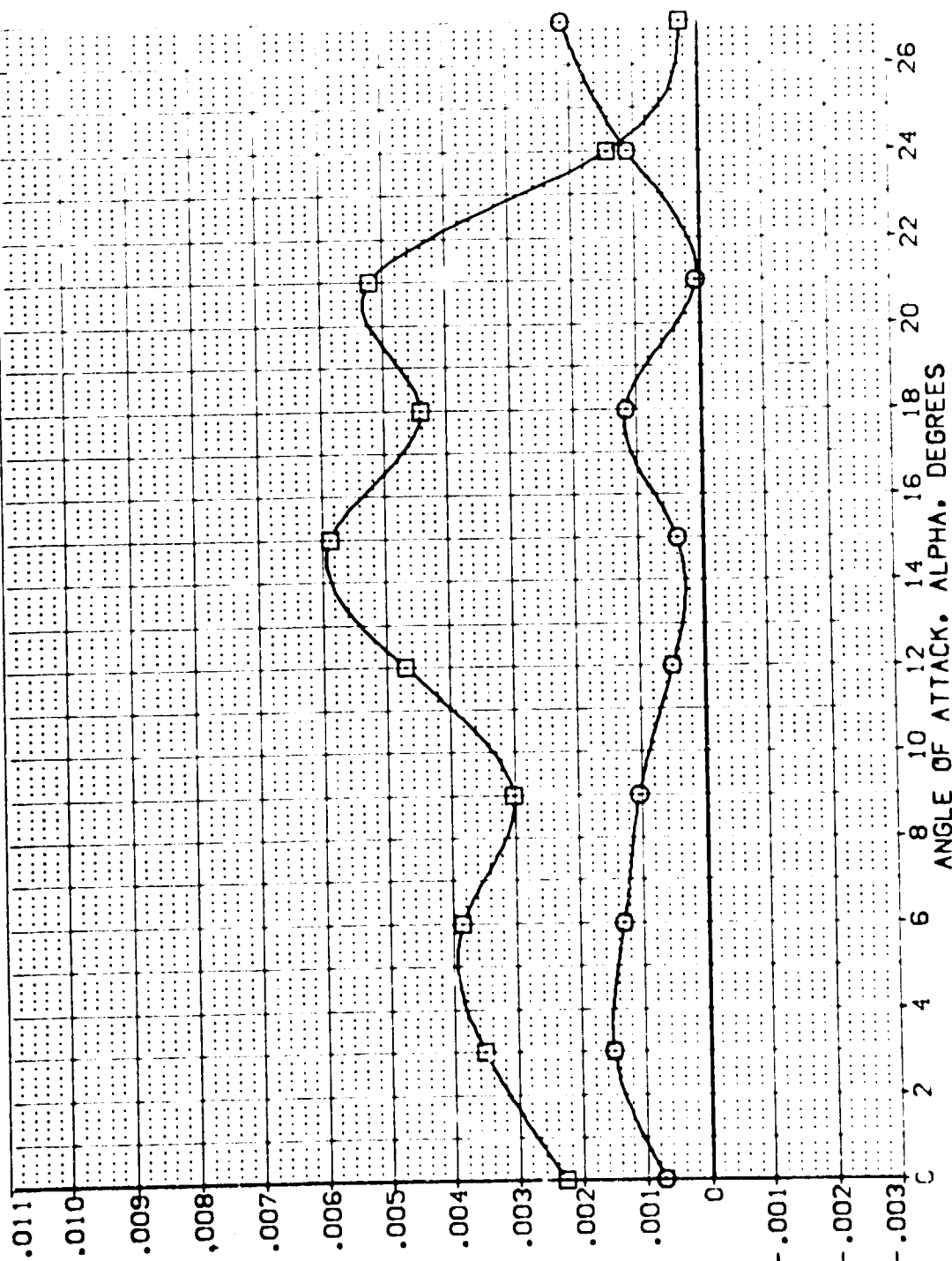


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(E)MACH = 1.20

DATA SET SYMBOL CONFIGURATION DESCRIPTION REFERENCE INFORMATION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	REFERENCE INFORMATION
(VEJ050)	ARC 11-747 DASSA B C M F VI V	SREF 2.4210 SQ.FT.
(VEJ049)	ARC 11-747 DASSA B C M F VI V	LREF 14.2440
		SREF 28.1004
		XMRD 32.3010
		YMRD .0000
		ZMRD 11.2500
		SCALE .0300

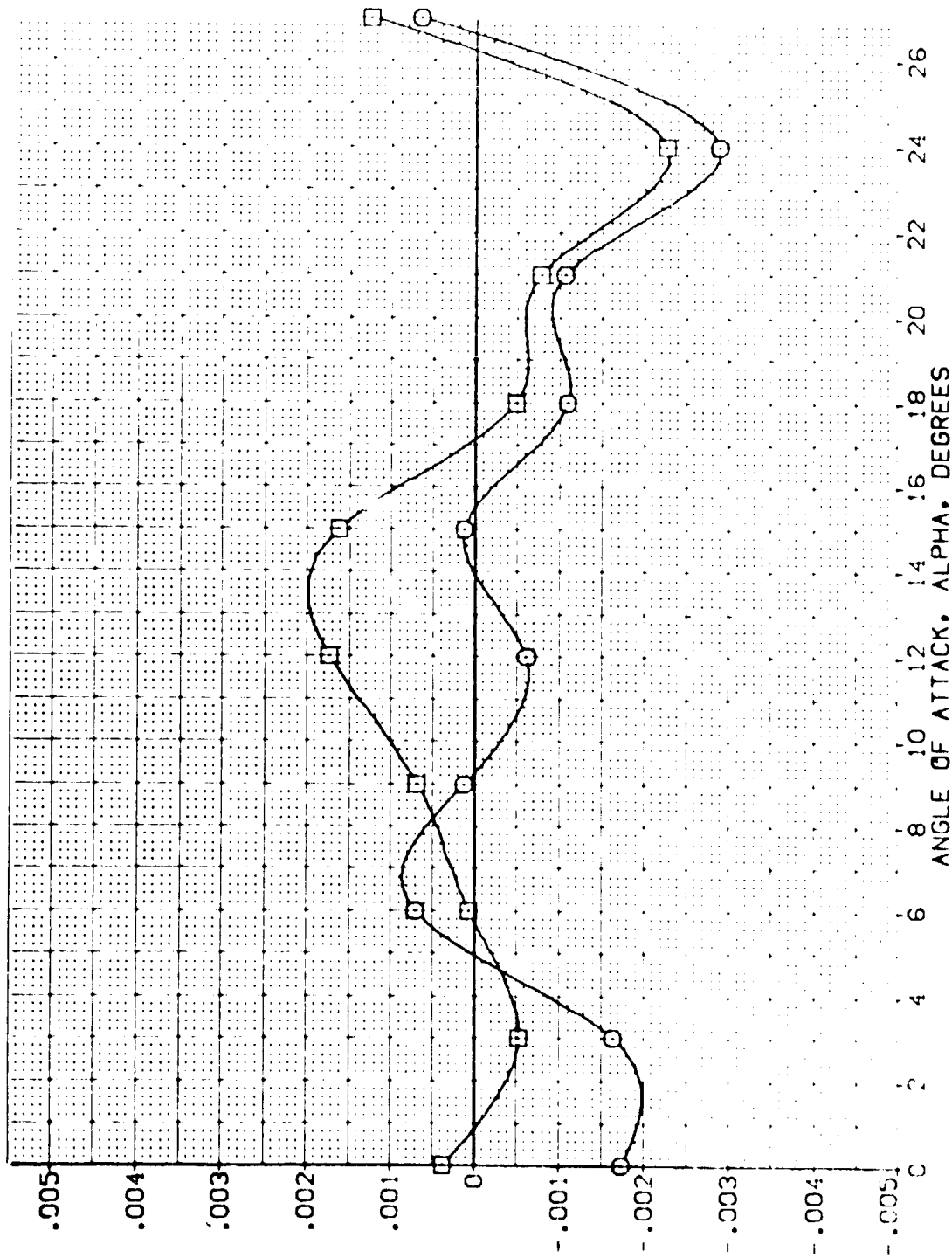


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(A) MACH = .60







DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AIRLON	BOFLAP	SPORRY	REFERENCE INFORMATION
(VEJ020)	ARC 11-747 BA53A B C M F VI V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(VEJ019)	ARC 11-747 BA53A B C M F VI V	15.000	.000	16.300	25.000	LREF 14.2440
						BREF 28.1004
						XMPR 32.3010
						YMPR .0000
						ZMPR .0000
						SCALE 11.2500
						SCALE .0300

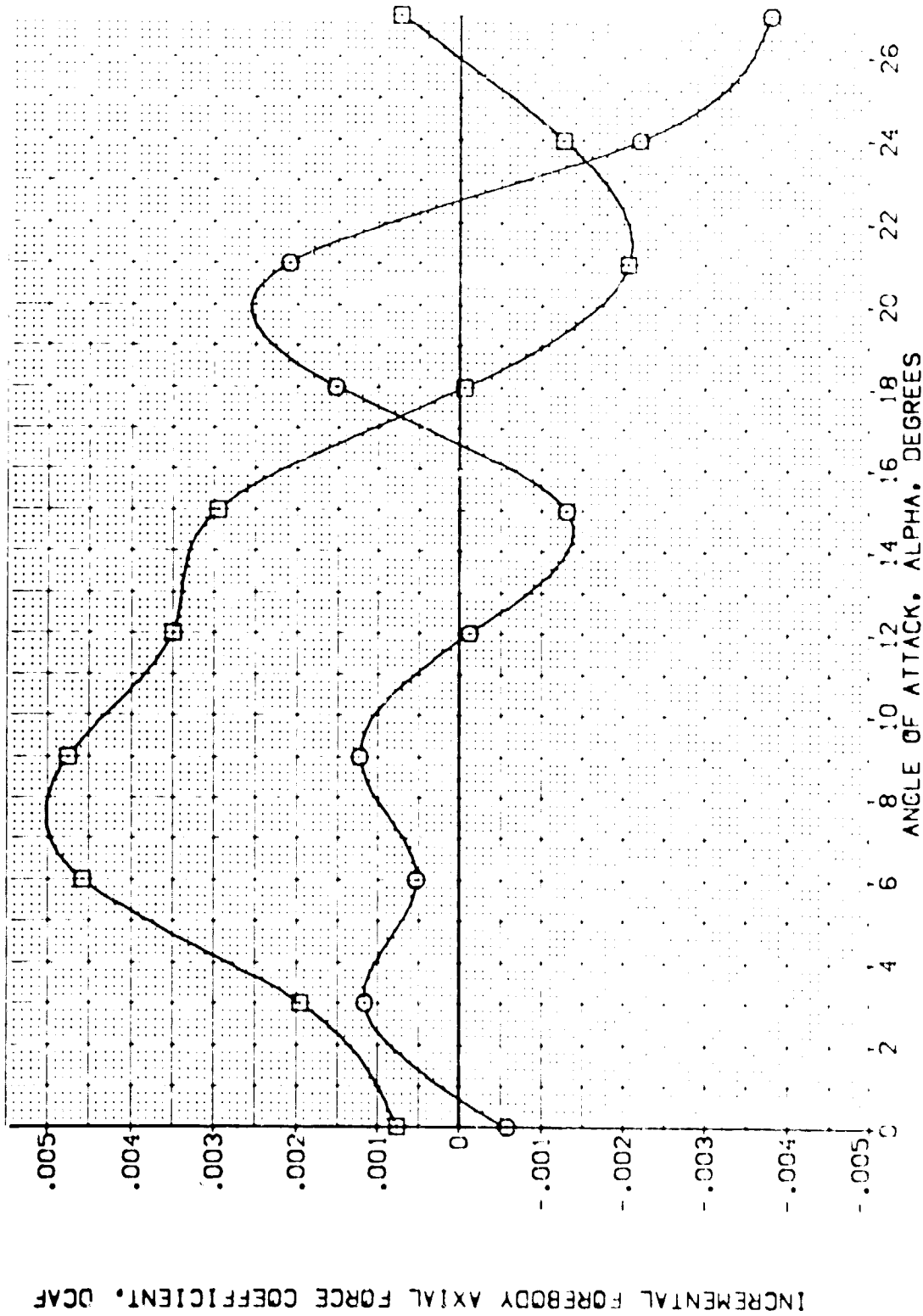


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(C)MACH = .90

INCREMENTAL FOREBODY AXIAL FORCE COEFFICIENT, DCAF

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOE LAP	SPD BRK	REFERENCE INFORMATION
{VEJ050}	ARC 11-747 OAS3A B C M F V1 V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
{VEJ049}	ARC 11-747 OAS3A B C M F V1 V	.000	.000	16.300	25.000	LREF 14.2440 IN.
		15.000				BREF 28.1004 IN.
						XMREF 32.3010 IN.
						YMREF .0000 IN.
						ZMREF 11.2500 IN.
						SCALE .0300

INCREMENTAL FOREBODY AXIAL FORCE COEFFICIENT, DCAF

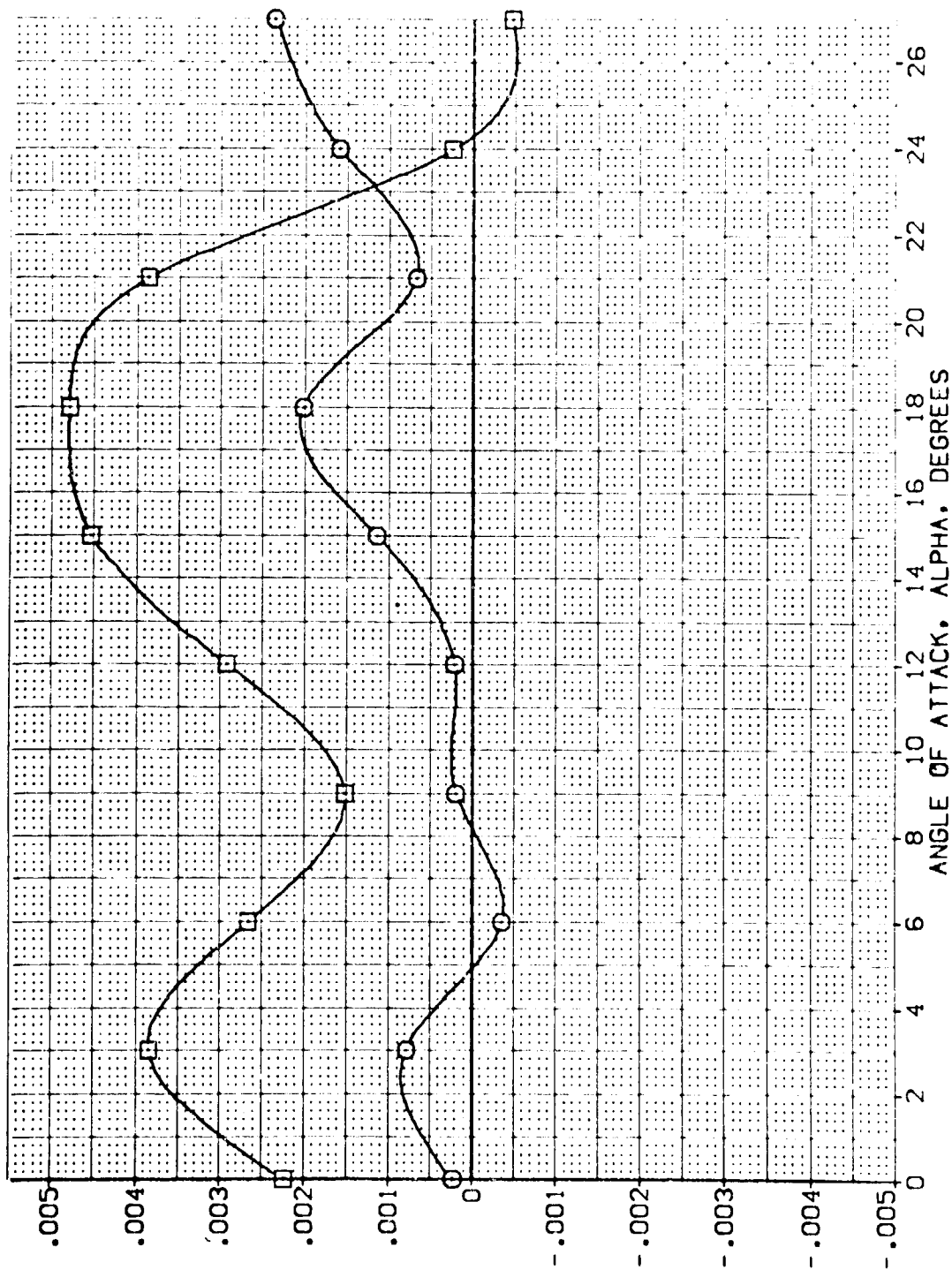


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(O)MACH = 1.05



DATA SET SYMBOL  
(VEJ050)  
(VEJ049)

CONFIGURATION DESCRIPTION  
ARC 11-747 DA53A B C M F VI V  
ARC 11-747 DA53A B C M F VI V

NON: RN/L SEAL.EL  
NON: RN/L SEAL.EL

ELEVON  
.000  
15.000

AILRON  
.000  
.000

BOFLAP  
16.300  
16.300

SPOBRK  
25.000  
25.000

REFERENCE INFORMATION  
SPREF 2.4210 SQ.FT.  
LREF 14.2440 IN.  
BREF 28.1004 IN.  
XMRP 32.3010 IN.  
YMRP .0000 IN.  
ZMRP 11.2500 IN.  
SCALE .0300

INCREMENTAL FOREBODY AXIAL FORCE COEFFICIENT, DCAF

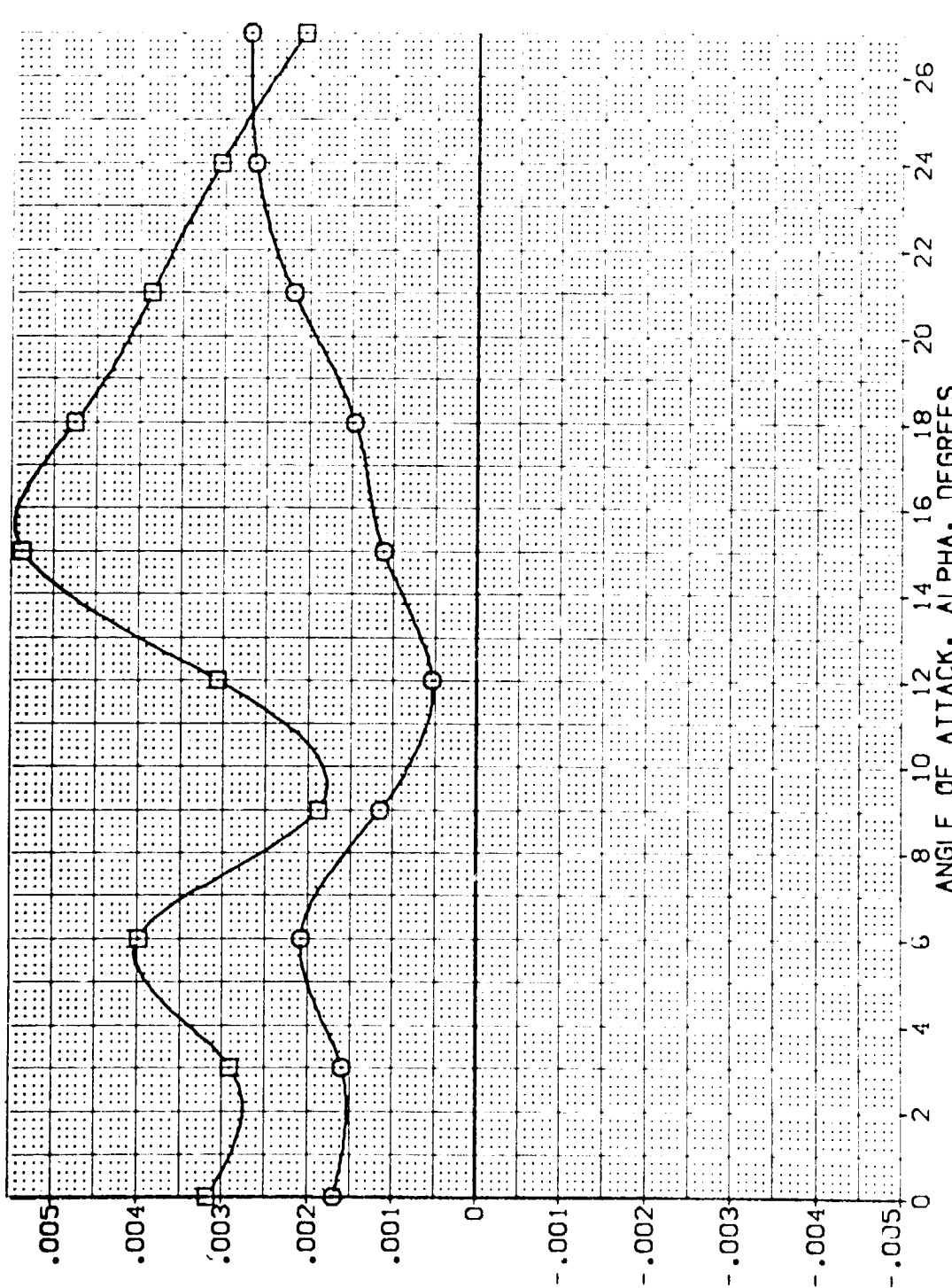


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(E)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPDBRK	REFERENCE INFORMATION
[VEJ050]	ARC 11-747 0A53A B C M F V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
[VEJ049]	ARC 11-747 0A53A B C M F V	.000	.000	16.300	25.000	LREF 14.2440 IN.
		15.000				BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

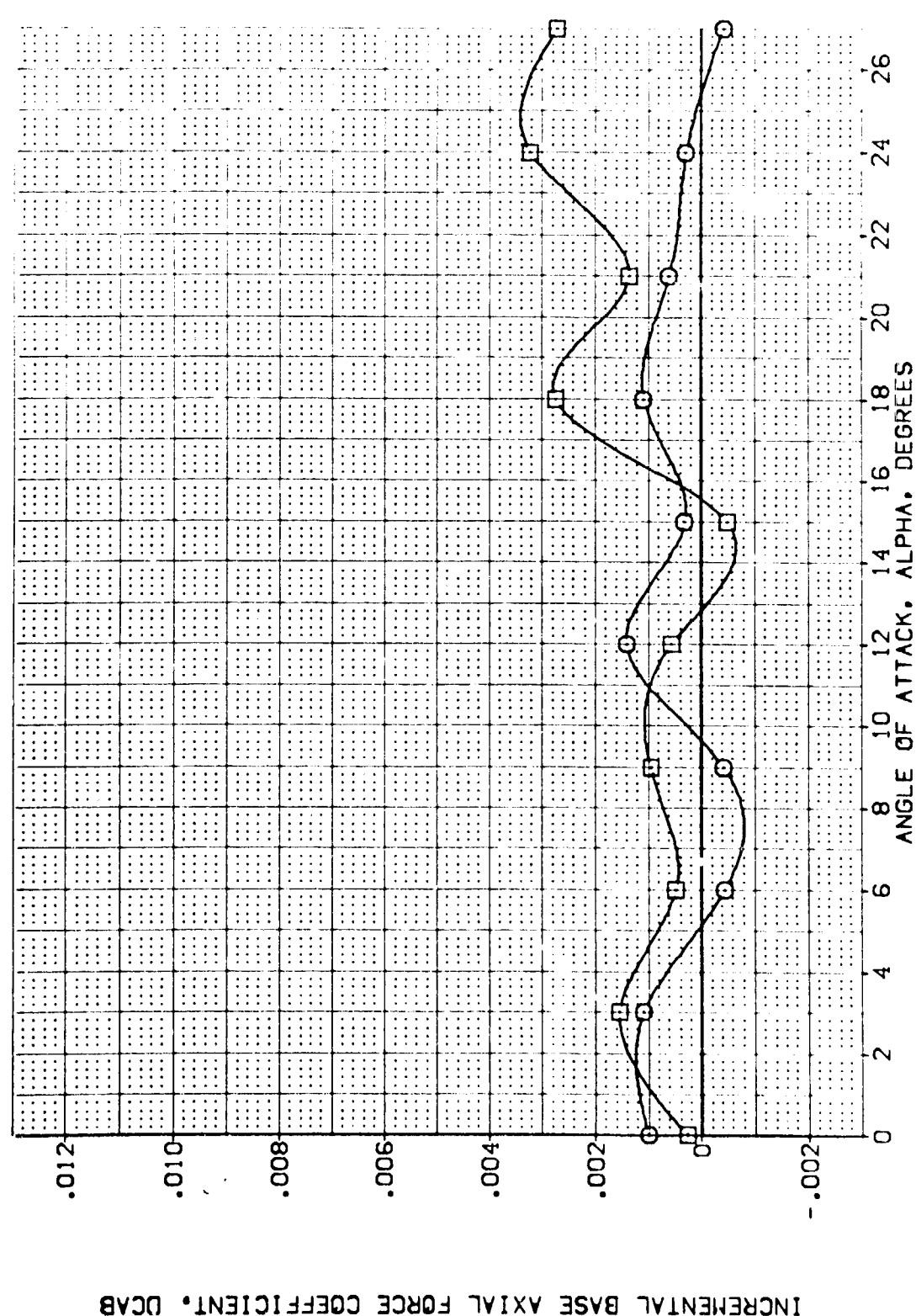


FIG. 10 SEALED ELEVON SPLIT EFFECTS

[A]MACH = .60



DATA SET SYMBOL: [VEJ050] [VEJ049]  
CONFIGURATION DESCRIPTION: ARC 11-747 BA53A B C M F V1 V NOM: RNVL SEAL EL 15.000  
ELEVON: .000  
AILRON: .000  
BDF LAP: 16.300  
SPDRBK: 25.000  
REFERENCE INFORMATION: SREF: 2.4210 SQ. FT.  
LREF: 14.2440  
BREF: 28.1004  
XMRP: 32.3010  
YMRP: .0000  
ZMRP: 11.2500  
SCALE: .0300

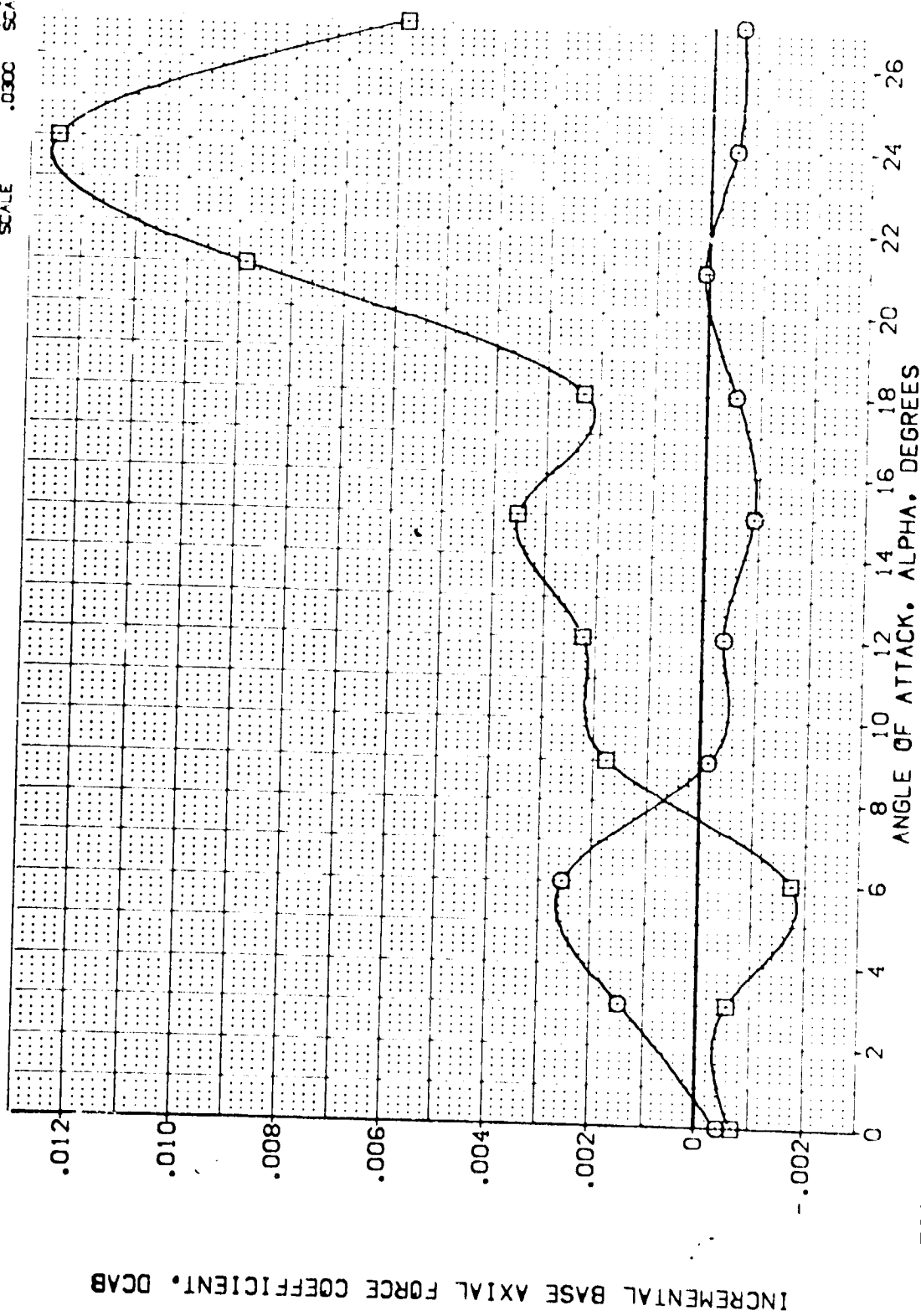


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(B)MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILRON	BDF LAP	SPDRBK	REFERENCE INFORMATION
(VEJ050)	ARC 11-747 DAS3A B C H F VI V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(VEJ049)	ARC 11-747 DAS3A B C H F VI V	15.000	.000	16.300	25.000	LREF 14.2440 IN.
						BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

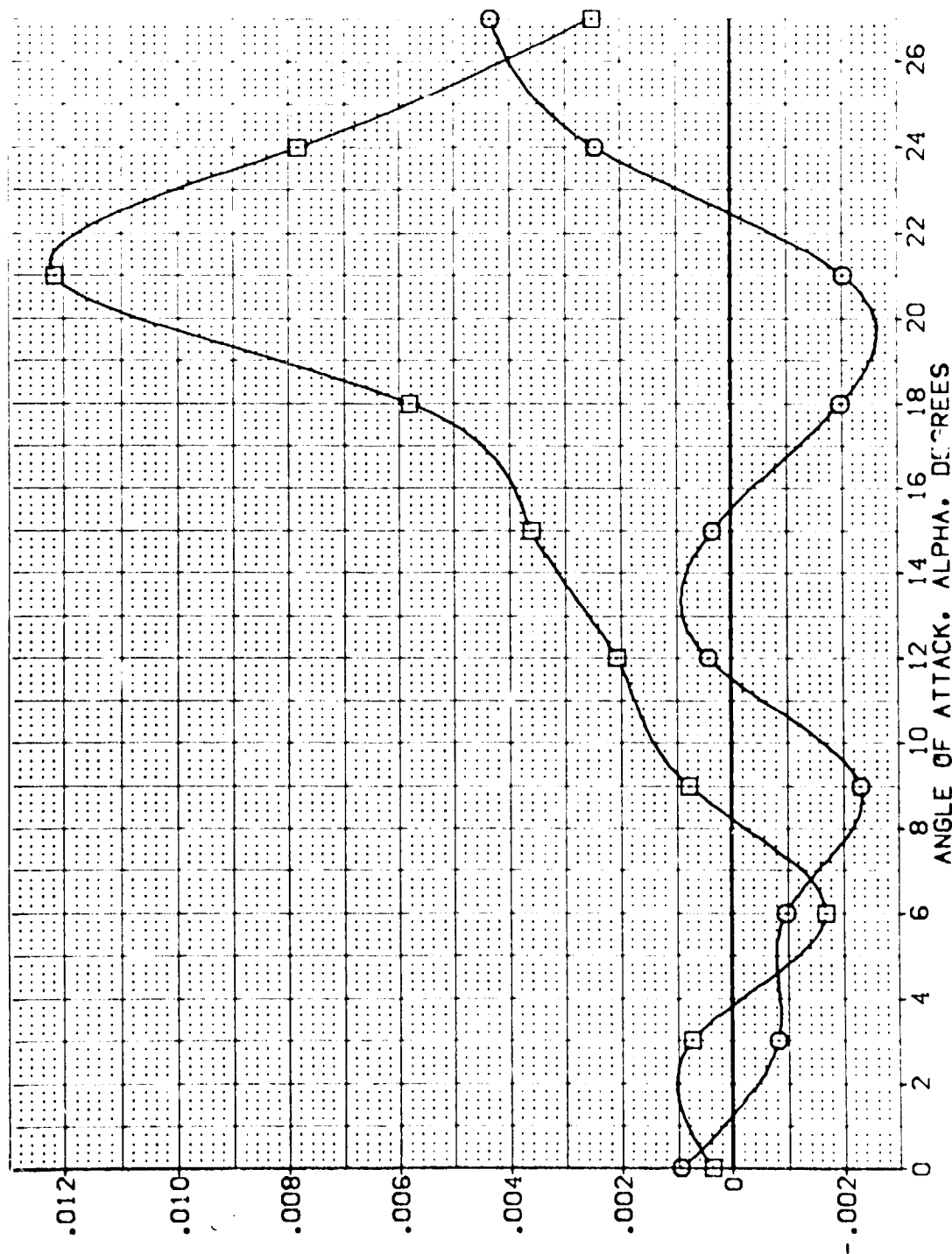


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(C)MACH = .90

DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 [VEJ050] ARC 11-747 QAS3A B C H F VI V  
 [VEJ049] ARC 11-747 QAS3A B C H F VI V

ELEVON AILERON BOFLAP SPOILER  
 .000 .000 25.000 25.000  
 .000 .000 16.300 16.300

REFERENCE INFORMATION  
 SPREF 2.4710 50.0 FT.  
 LPREF 14.2140 IN.  
 BPREF 28.1004 IN.  
 XMPRO 32.3010 IN.  
 YMPRO 11.2500 IN.  
 SCALE .0300 SCALE

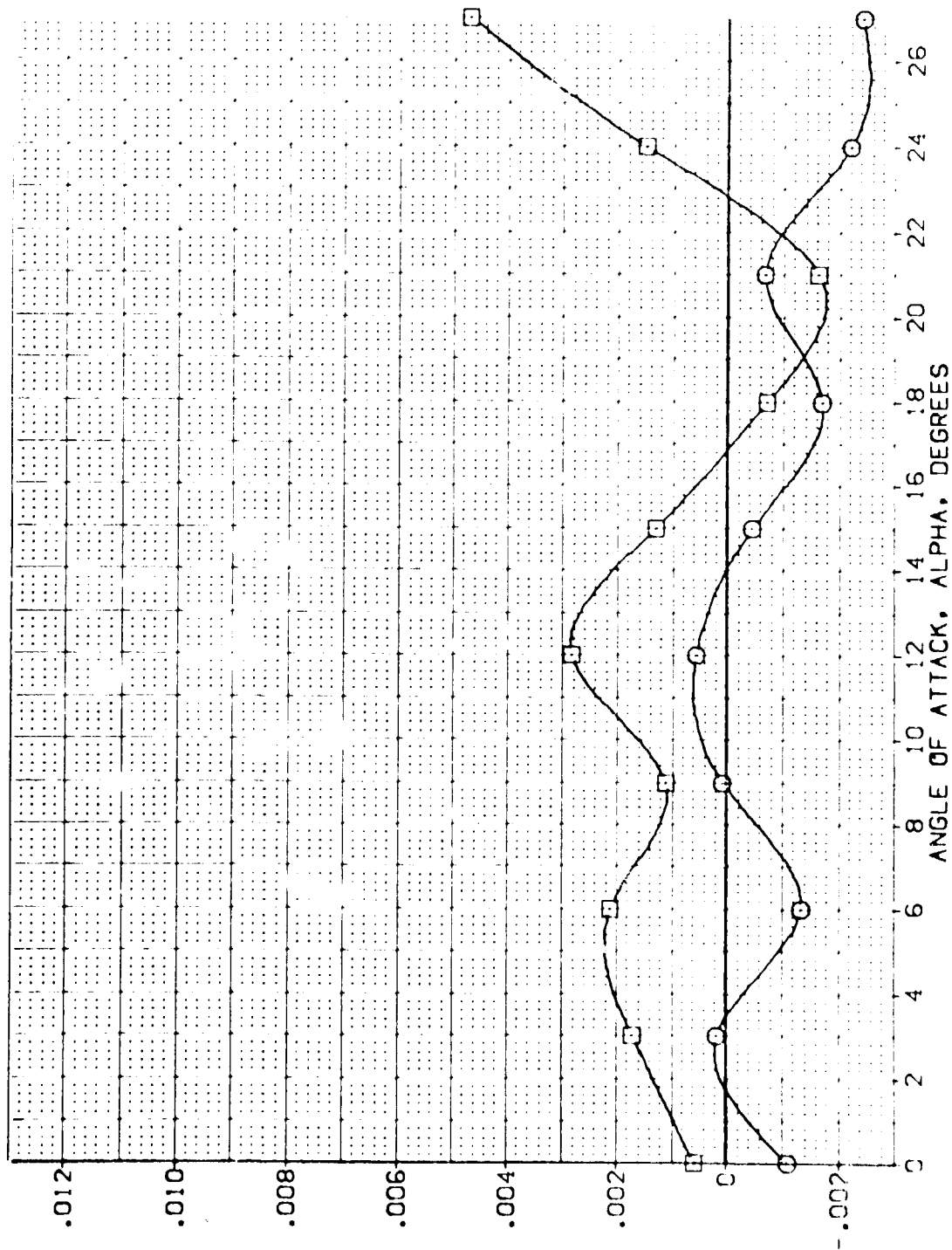


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(D)MACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BD FLAP	SPOILER	REFERENCE INFORMATION
(VEJ050)	ARC 11-747 BAS3A B C M F VI V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(VEJ049)	ARC 11-747 BAS3A B C M F VI V	15.000	.000	16.300	25.000	LREF 14.2440 IN.
						BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP 11.0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

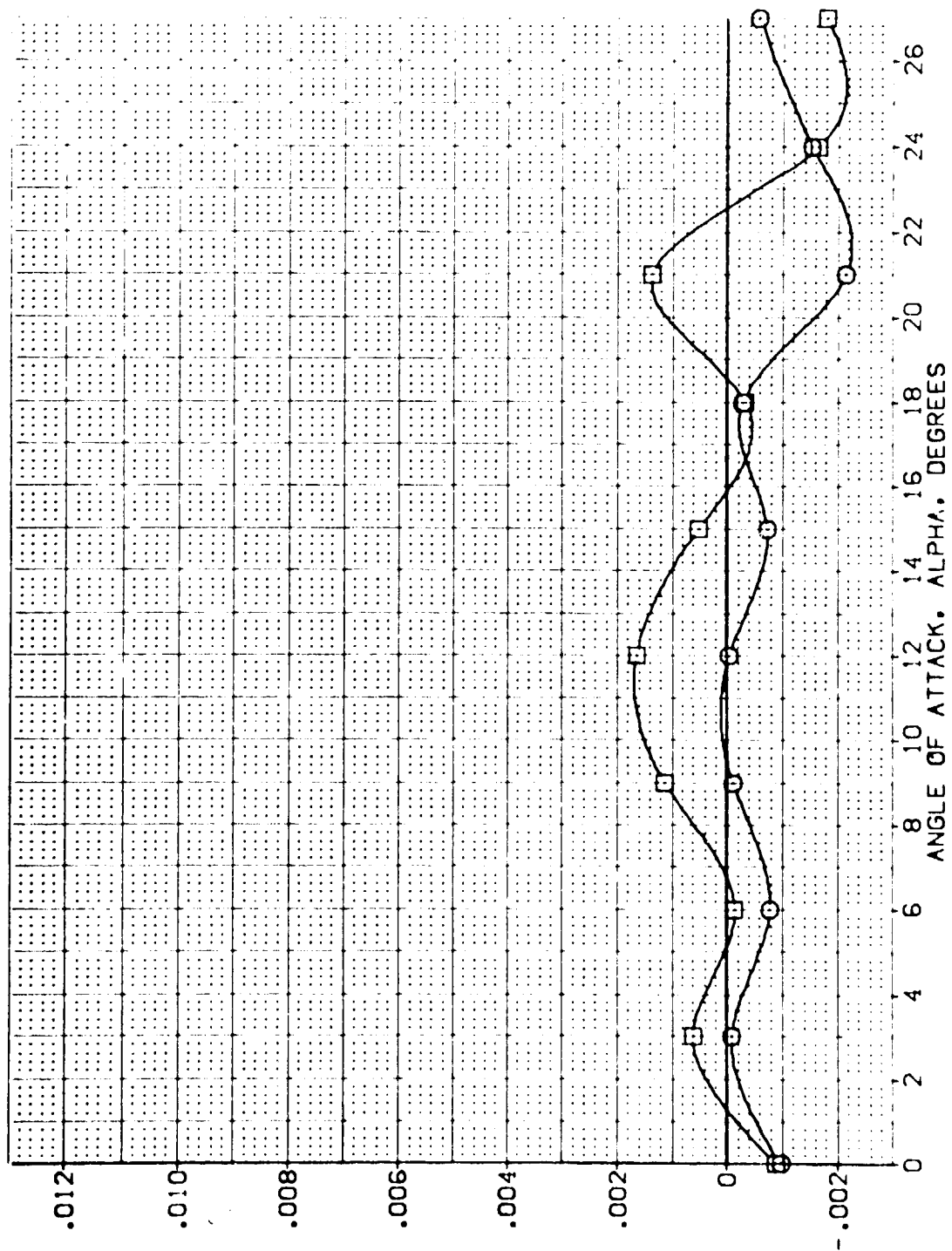


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(C)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AIRLON	BOLAP	SPOBRK	REFERENCE INFORMATION
(VEJ050)	ARC 11-747 BA33A B C H F V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(VEJ049)	ARC 11-747 BA33A B C H F V	.000	.000	16.300	25.000	LREF 14.2440
						BREF 28.1004
						XMRP 32.3010
						YMRP 32.3010
						ZMRP 11.2500
						SCALE .0300

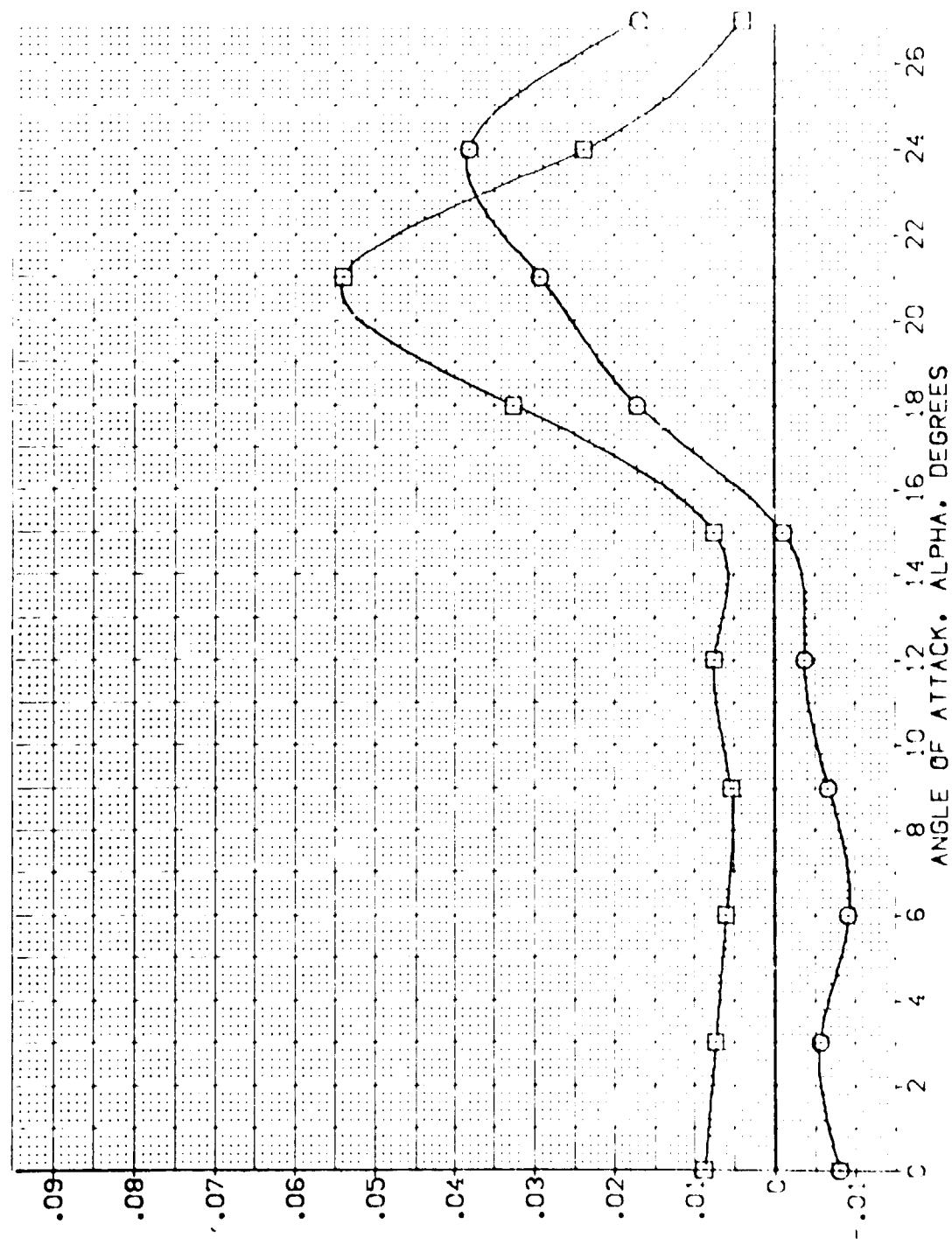


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(A) MACH = .60



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPDRBK	REFERENCE INFORMATION
(VEJ050)	ARC 11-747 0A53A B C H F V1 V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(VEJ049)	ARC 11-747 0A53A B C H F V1 V	15.000	.000	16.300	25.000	LREF 14.2440 IN.
						BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

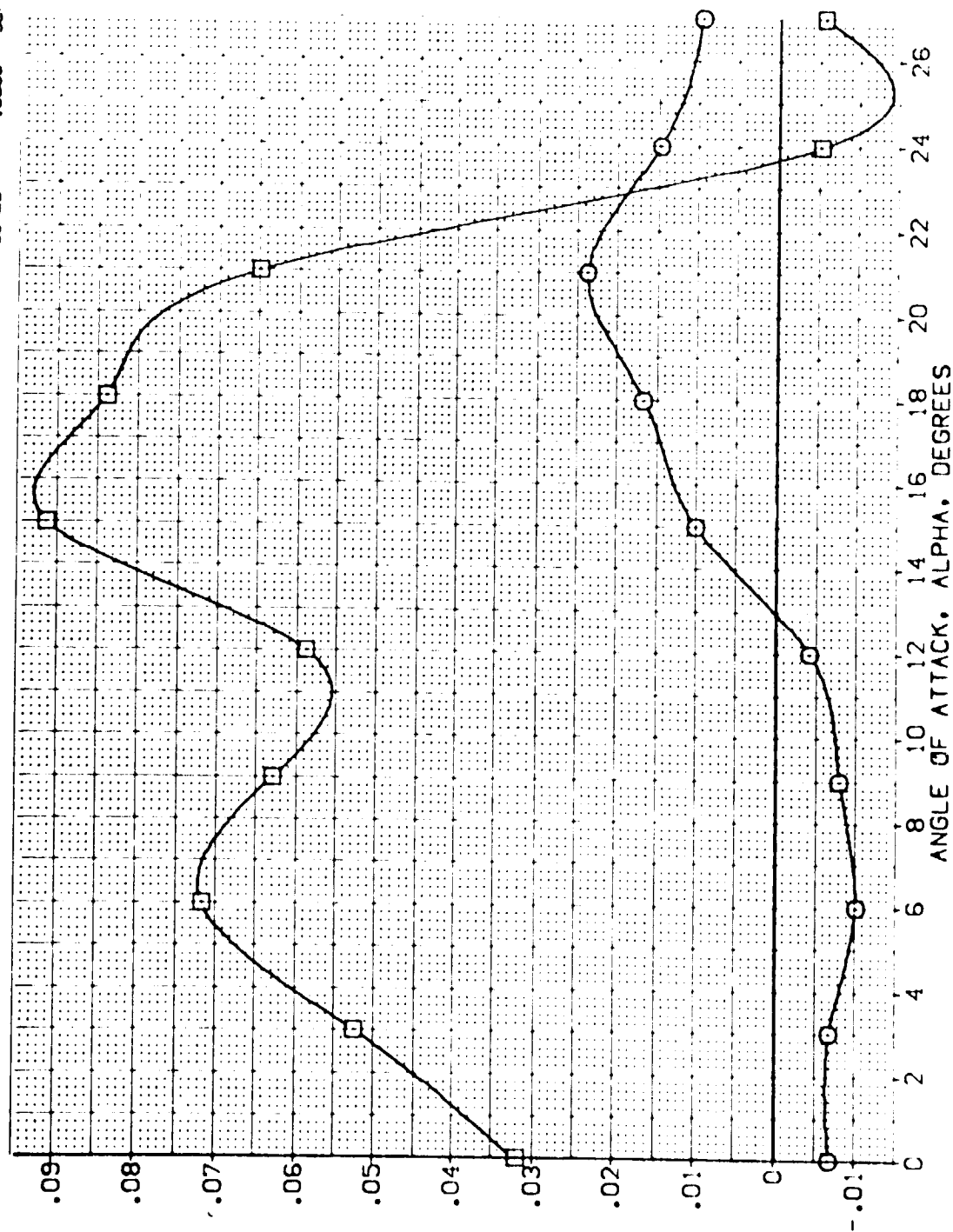


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(B)MACH = .80





DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILIRON	BDF LAP	SPDRBK	REFERENCE INFORMATION
(VEJ050)	ARC 11-747 QAS3A B C M F V1 V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(VEJ049)	ARC 11-747 QAS3A B C M F V1 V	15.000	.000	16.300	25.000	LREF 14.2440 IN.
						BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP 11.0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

INCREMENTAL NORMAL FORCE COEFFICIENT, DCN

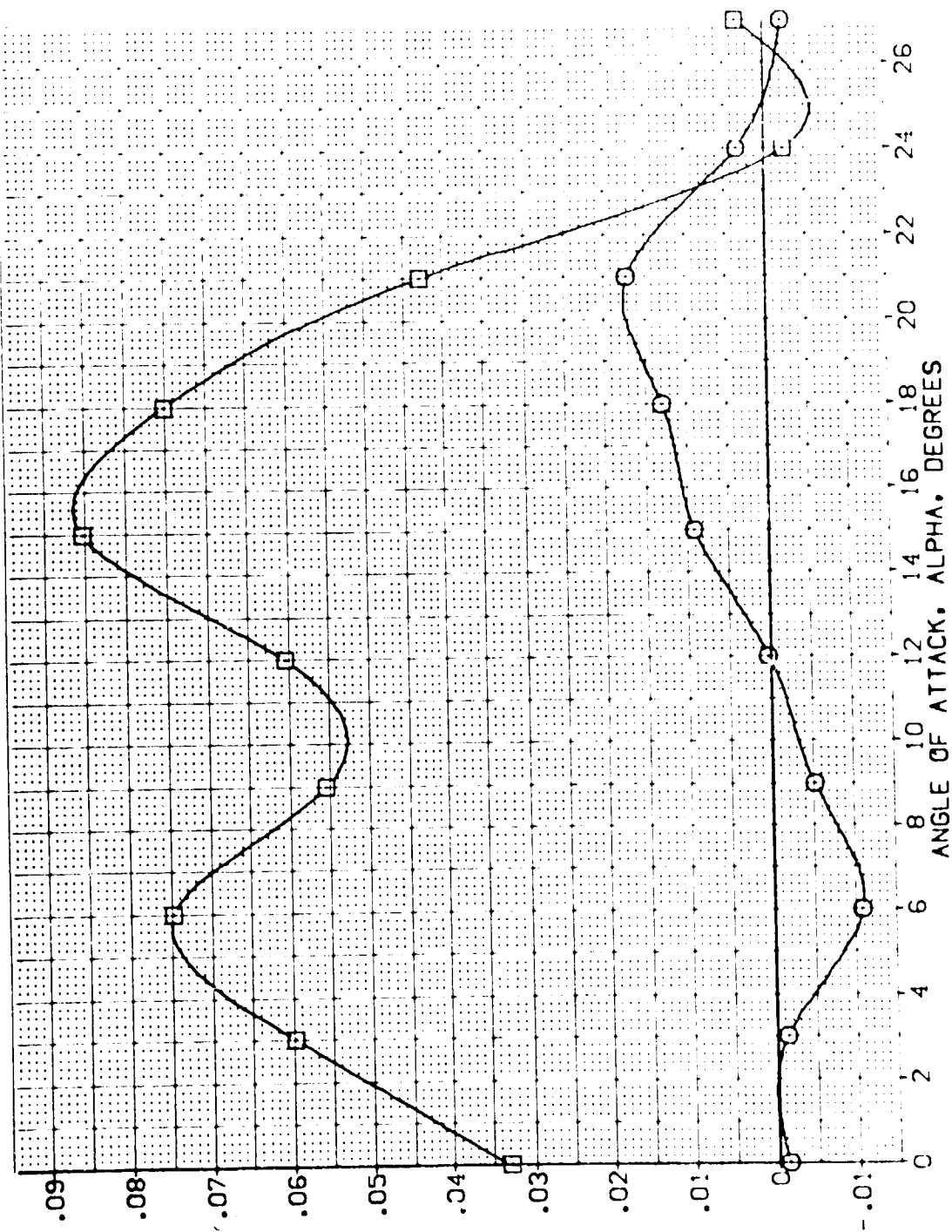


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(C)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPDRK	REFERENCE INFORMATION
(VEJ050)	ARC 11-747 OAS3A B C H F VI V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(VEJ049)	ARC 11-747 OAS3A B C H F VI V	15.000	.000	16.300	25.000	LREF 14.2440
						BREF 28.1004
						YREF 32.3010
						ZREF 11.2500
						SCALE .0300

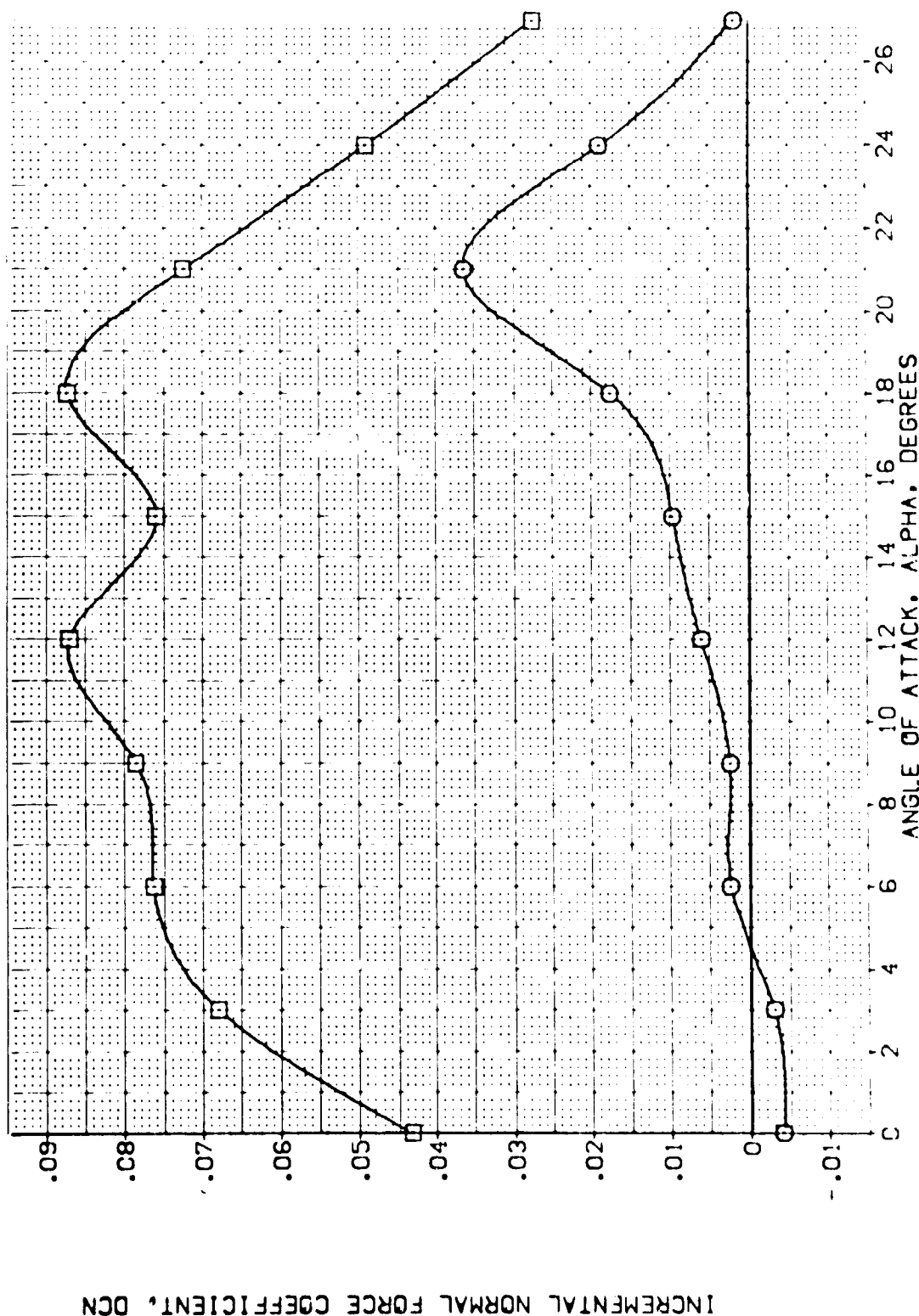


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(D)MACH = 1.05

DATA SET SYMBOL: (VEJ050) (VEJ049)

CONFIGURATION DESCRIPTION: ARC 11-747 OAS3A B C H F V1 V NON- RVAL SEAL.EL 15.000 ELEVON .000 AILRON .000 BOFLAP 16.300 25.000 25.000 SPOBRK

REFERENCE INFORMATION: SREF 2.4210 SQ.FT. LREF 14.2443 IN. BREF 28.1004 IN. XMRP 32.3010 IN. YMRP .0000 IN. ZMRP 11.2500 IN. SCALE .0300

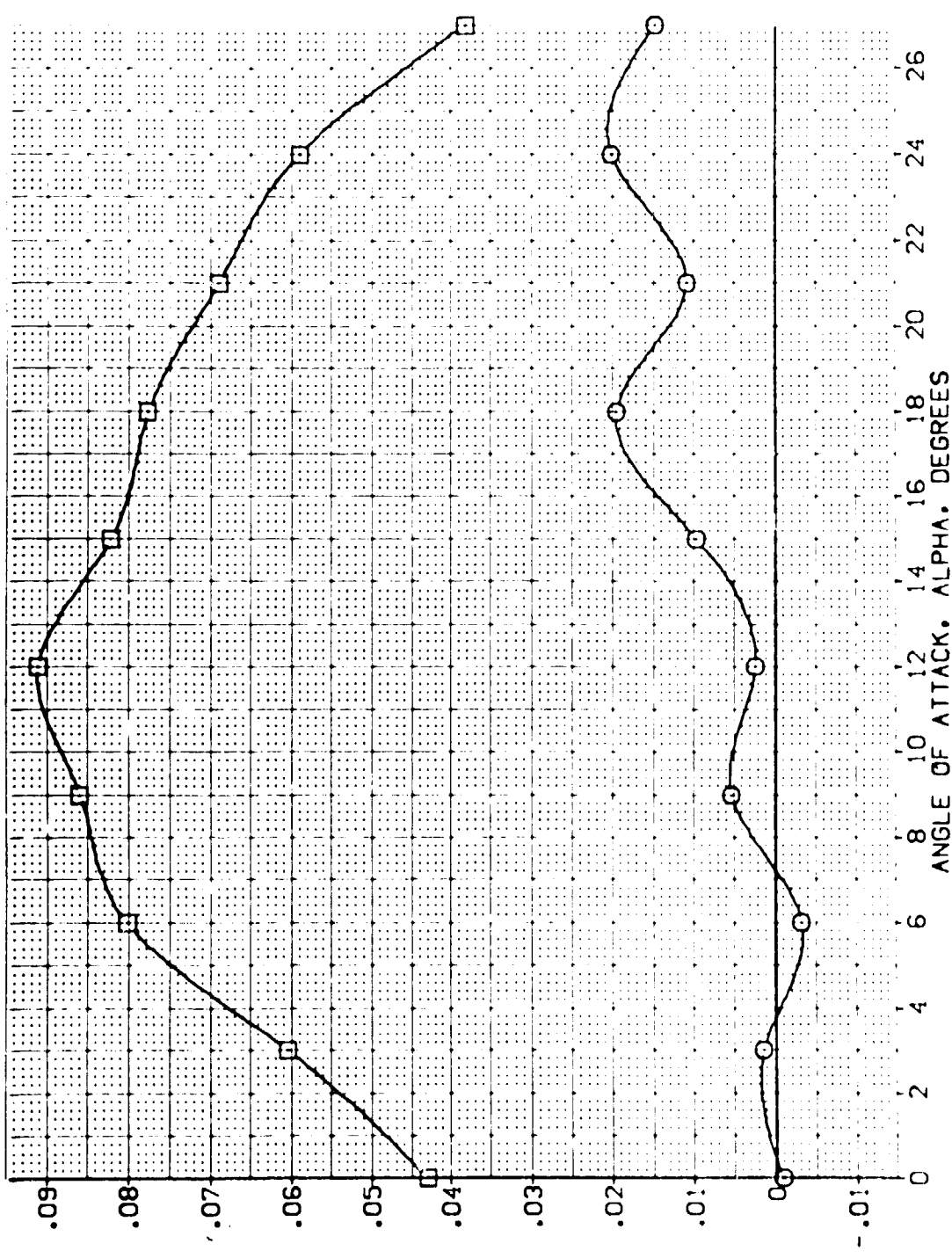


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(E)MACH = 1.20



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPDBRK	REFERENCE INFORMATION
{VEJ050}	ARC 11-747 0A53A B C H F VI V	.000	.000	16.300	25.000	SREF 2.4210 SQ. FT.
{VEJ049}	ARC 11-747 0A53A B C H F VI V	15.000	.000	16.300	25.000	LREF 14.2440 IN.
						BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP .0000 IN.
						SCALE 11.2500
						SCALE .0300

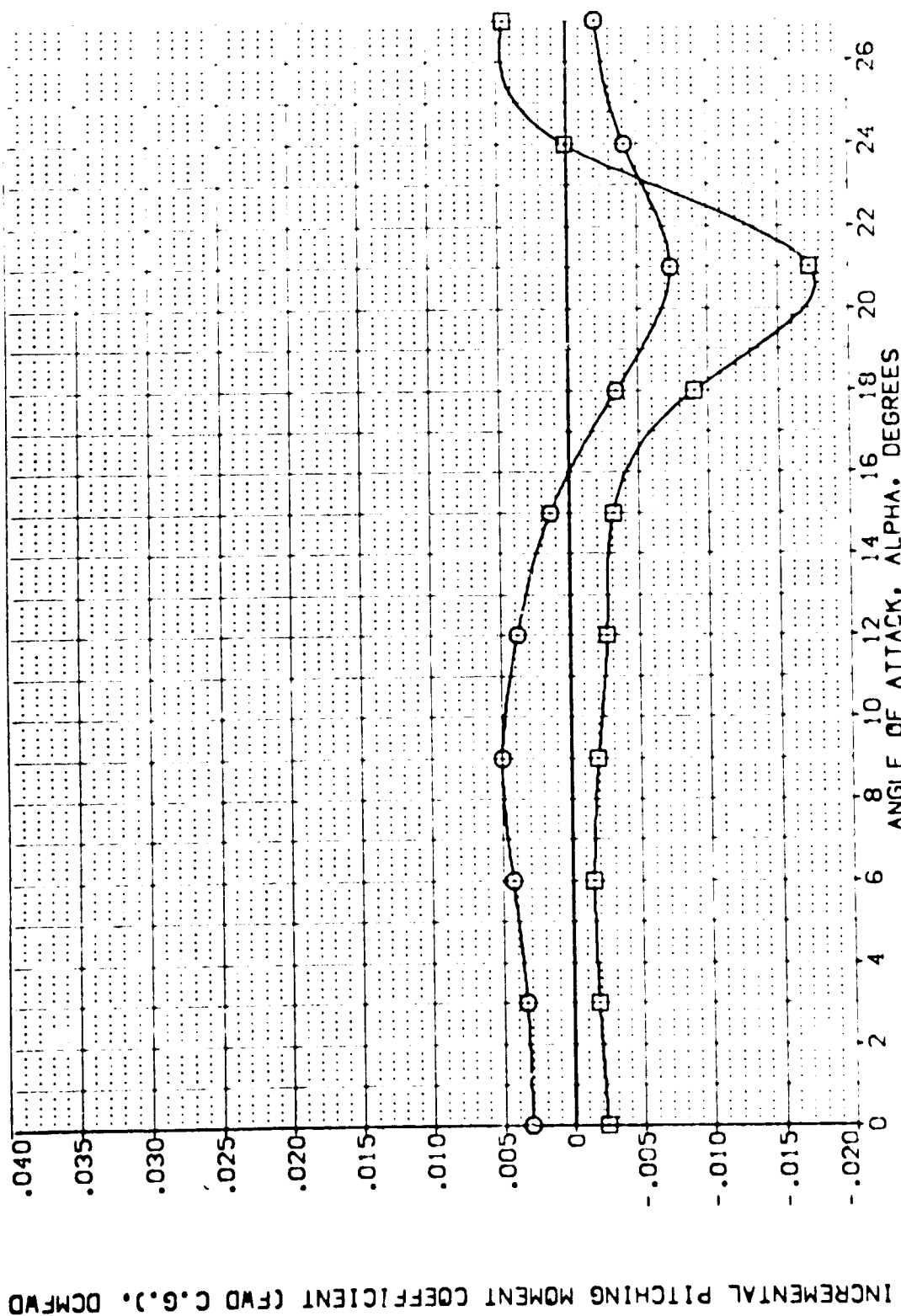


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(MACH = .60)

DATA SET SYMBOL: [ ]  
 CONFIGURATION DESCRIPTION:  
 ARC 11-747 OAS3A B C H F VI V  
 ARC 11-747 OAS3A B C H F VI V

ELEVON: .000  
 AILERON: .000  
 BDF LAP: 16.300  
 SPDRBK: 25.000

REFERENCE INFORMATION:  
 SREF: 2.4210  
 LREF: 14.2440  
 BREF: 28.1004  
 XREF: 32.3010  
 YREF: .0000  
 ZREF: 11.2500  
 SCALE: .0300

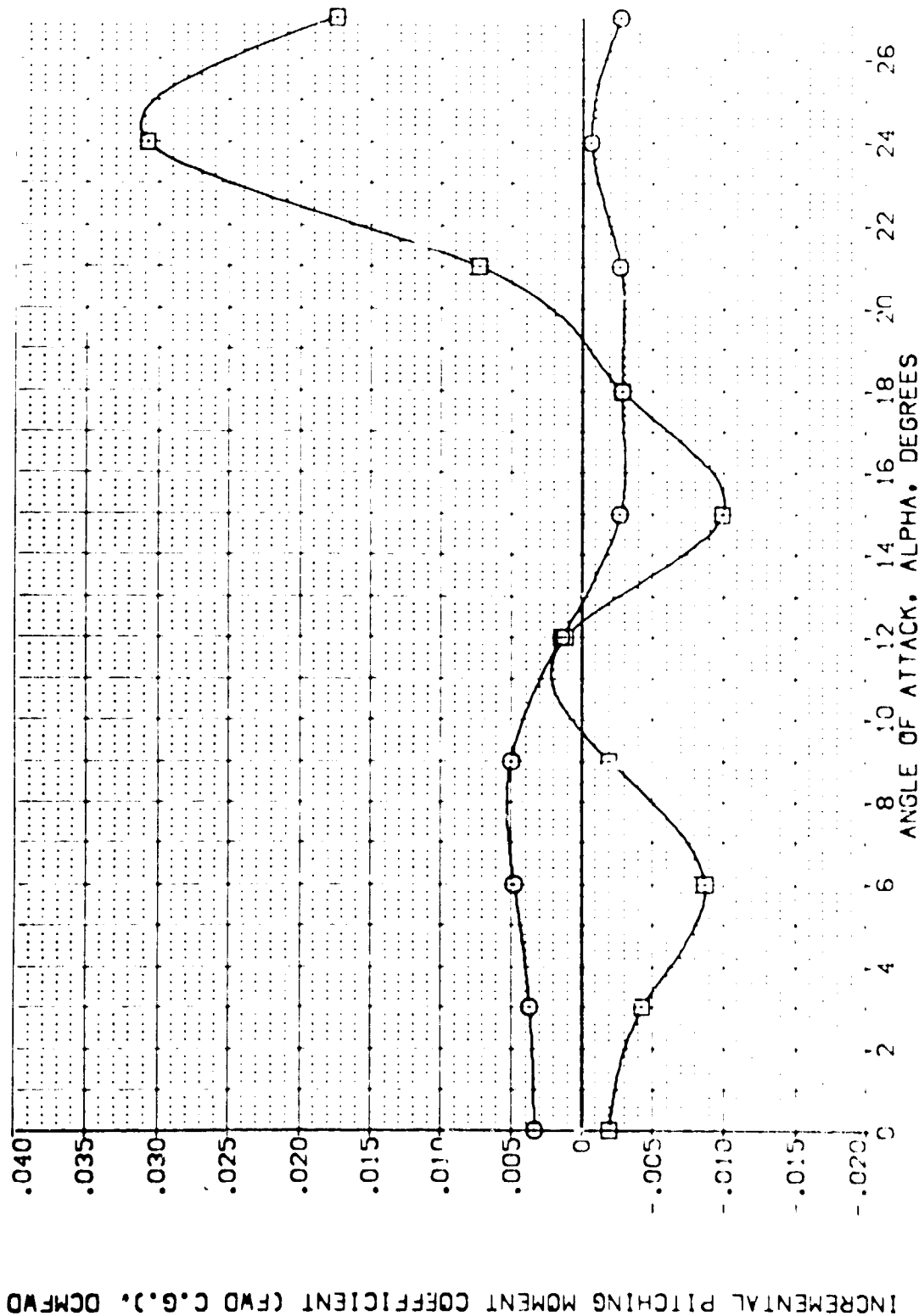


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(B)MAC = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BD FLAP	SPDBRK	REFERENCE INFORMATION
{VEJ050}	ARC 11-747 BAS3A B C H F V1	.000	.000	16.300	25.000	SPEF 2.4210 SQ.FT.
{VEJ049}	ARC 11-747 BAS3A B C H F V1	15.000	.000	16.300	25.000	LREF 14.2440 IN.
						BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300 SCALE

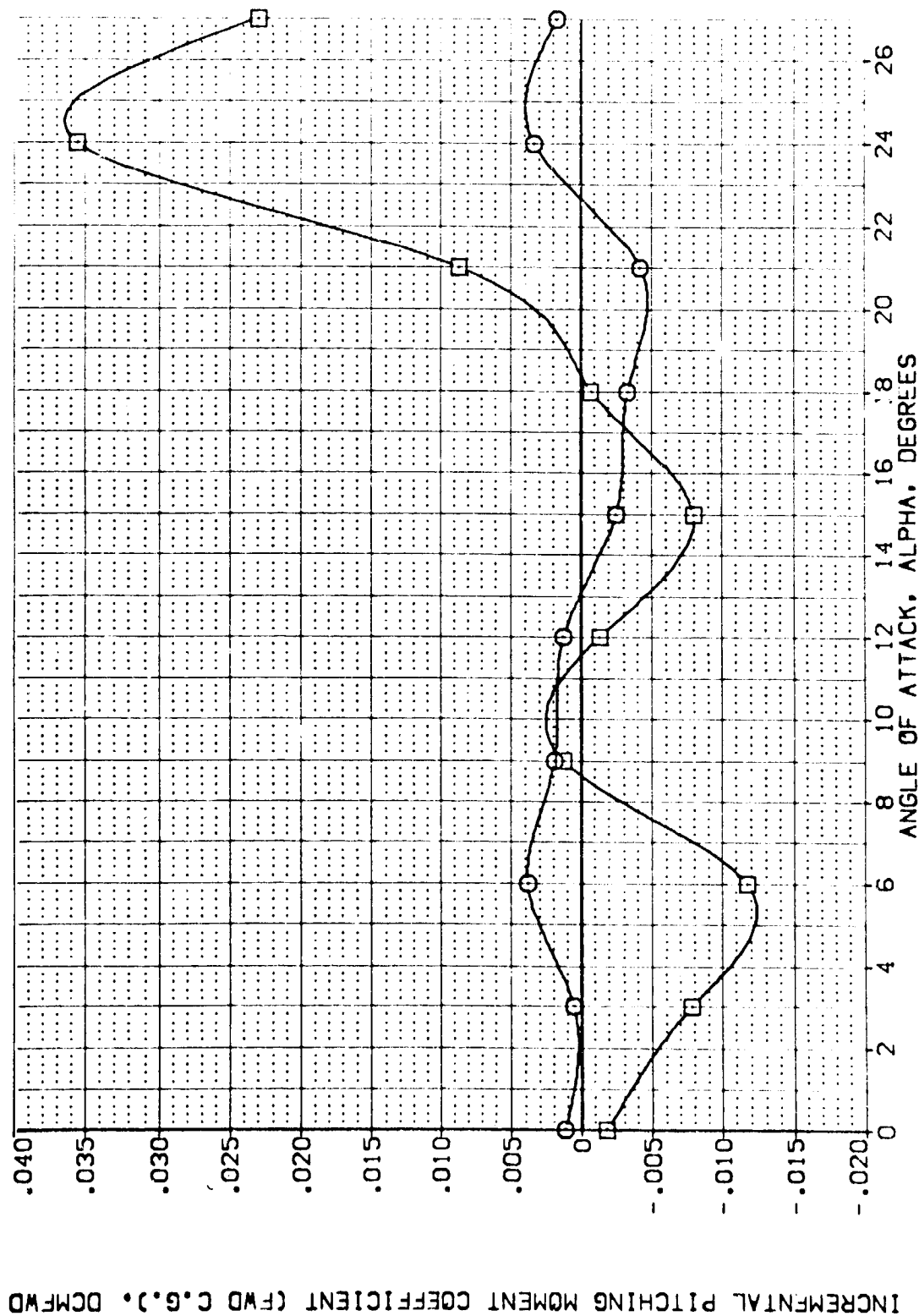


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(C)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	ATLIRON	BDFLAP	SPOBRK	REFERENCE INFORMATION
(VEJ050)	ARC 11-747 0A53A B C M F V1 V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(VEJ049)	ARC 11-747 0A53A B C M F V1 V	15.000	.000	16.300	25.000	LREF 14.2440 IN.
						BREF 28.1004 IN.
						XMREF 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

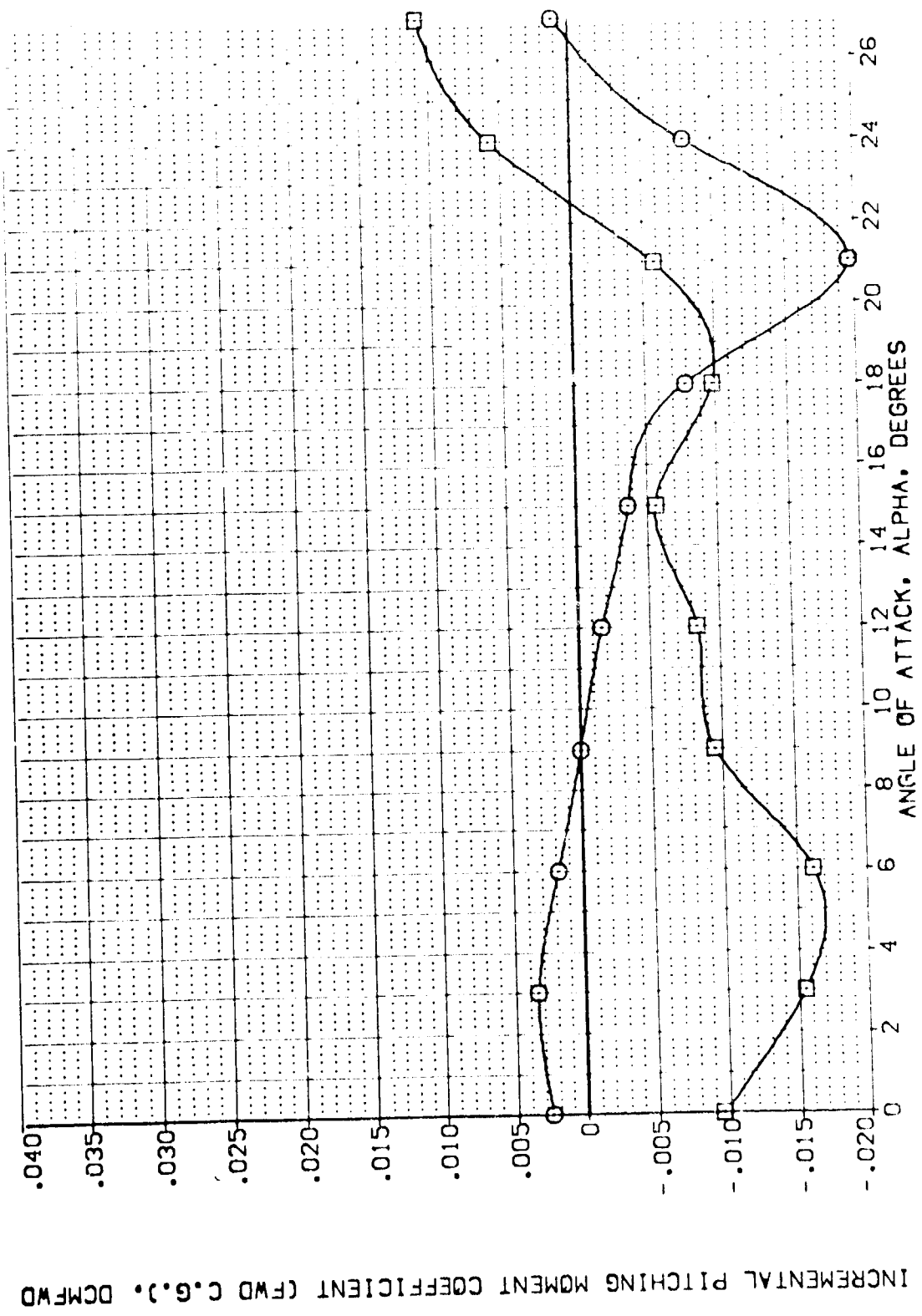


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(O)MACH = 1.05



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILURON	BOFLAP	SPDRBK	REFERENCE INFORMATION
(VEJ050)	ARC 11-747 D453A B C M F V I V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(VEJ049)	ARC 11-747 D453A B C M F V I V	15.000	.000	16.300	25.000	LREF 14.2440
						BREF 28.1304
						XMRD 32.3010
						YMRD .0000
						ZMRD 11.2500
						SCALE .0300

INCREMENTAL PITCHING MOMENT COEFFICIENT (FWD C.G.). DCMFWD

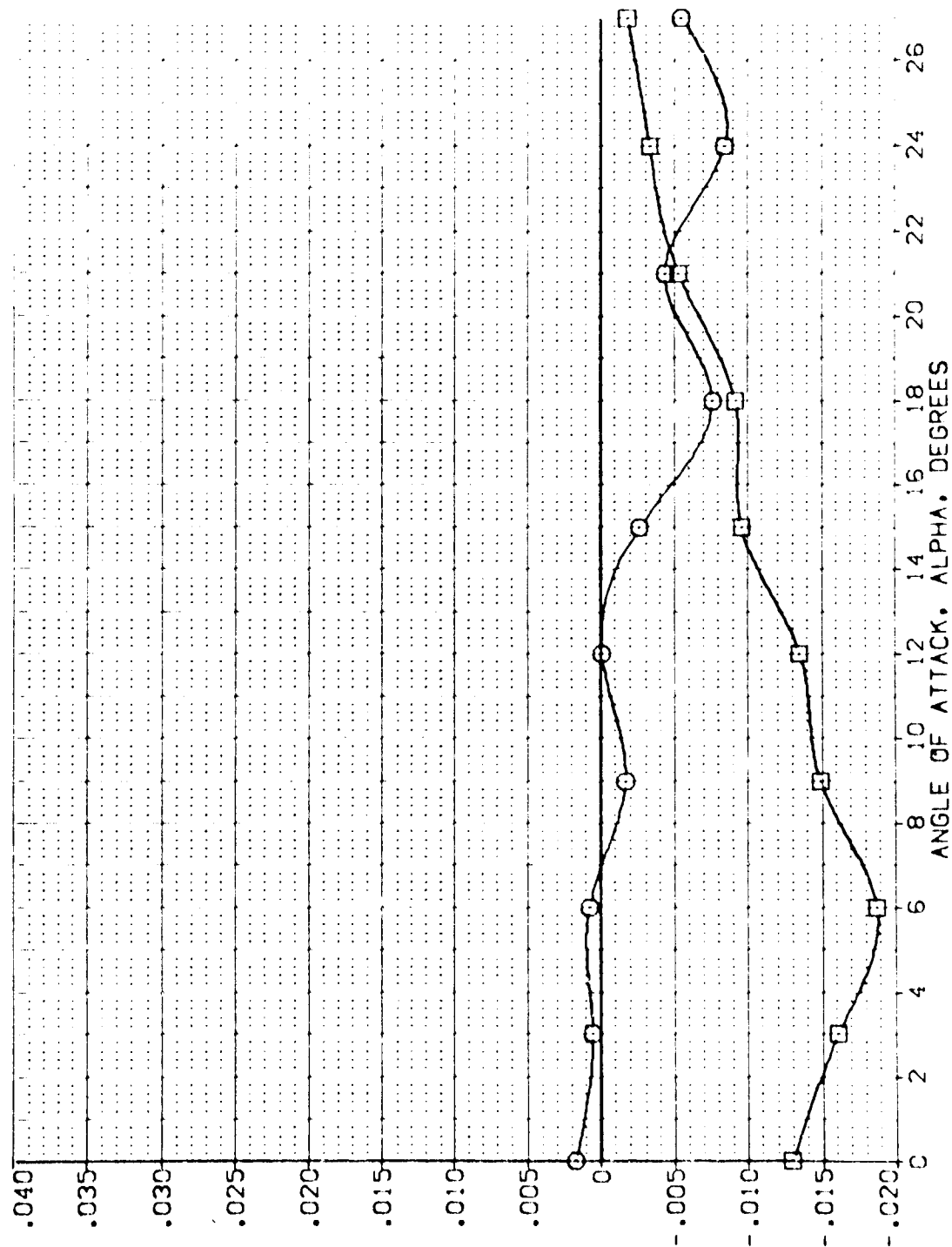


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(E)MACH = 0.20



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPOTBARK	REFERENCE INFORMATION
{VEJ050}	ARC 11-747 0A53A B C H F VI V	.000	.000	16.300	25.000	SREF 2.4210 50. FT.
{VEJ049}	ARC 11-747 0A53A B C H F VI V	.000	.000	16.300	25.000	LREF 14.2440
		15.000				BRF 28.1004
						XMRP 32.3010
						YMRP 0.000
						ZMRP 11.2500
						SCALE .0300

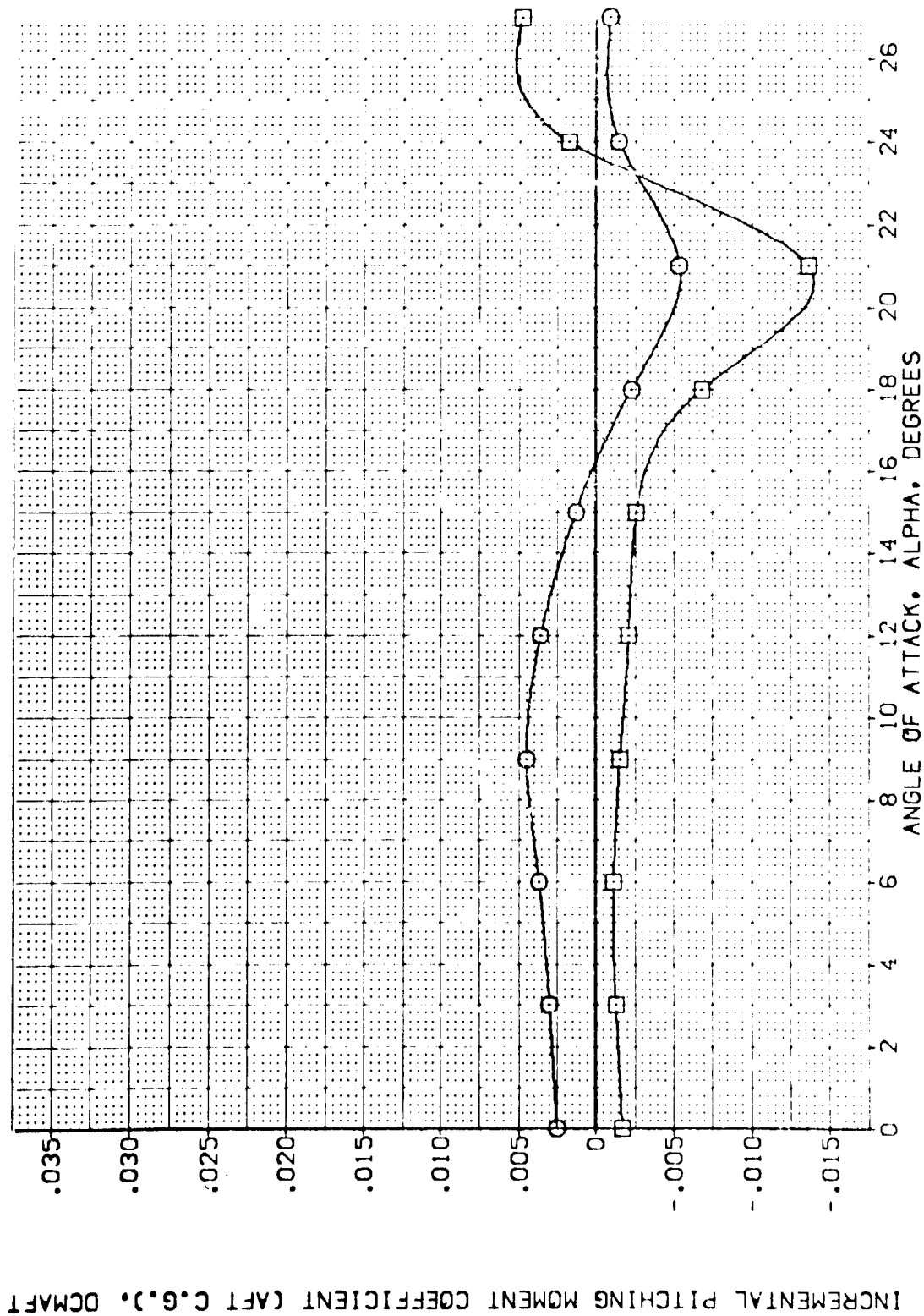


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(M)MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPOBRK	REFERENCE INFORMATION
(VEJ050)	ARC 11-747 OAS3A B C M F V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(VEJ049)	ARC 11-747 OAS3A B C M F V	.000	.000	16.300	25.000	LREF 14.2410
		15.000				BREF 28.1004
						XMRP 32.3010
						YMRP .0000
						ZMRP .0000
						SCALE 11.2500
						SCALE .0300

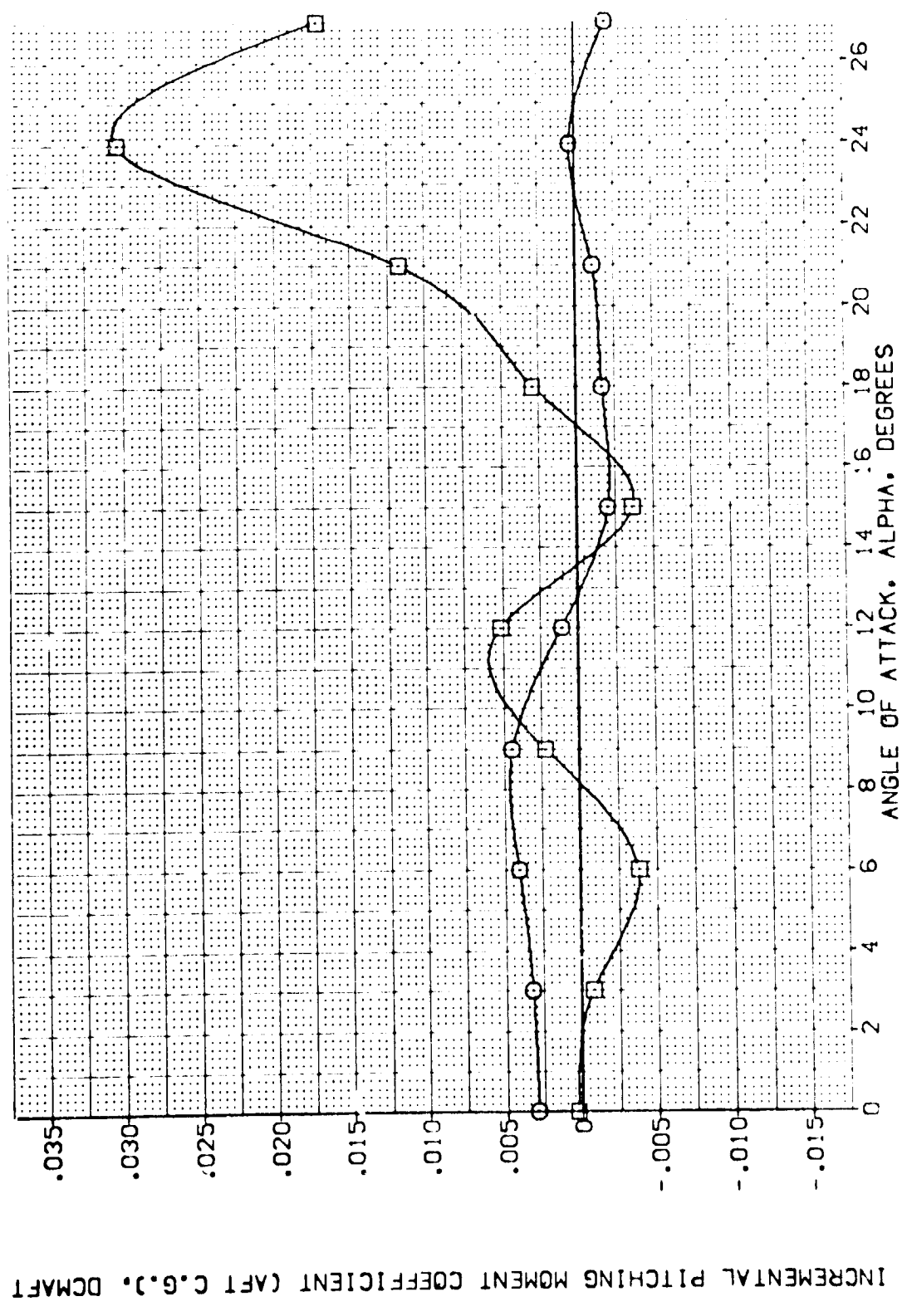


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(B) MACH = .80

DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 {VEJ050} ARC 11-747 DASSA B C H F VI V  
 {VEJ049} ARC 11-747 DASSA B C H F VI V

ELEVON AILRON BDF LAP SPOBRK  
 .000 .000 16.300 25.000  
 15.000 16.300 25.000

REFERENCE INFORMATION  
 SREF 2.4210 SQ.FT.  
 LREF 14.2440 IN.  
 BREF 28.1004 IN.  
 XMRP 32.3010 IN.  
 YMRP .0000 IN.  
 ZMRP 11.2500 IN.  
 SCALE .0300 SCALE

INCREMENTAL PITCHING MOMENT COEFFICIENT (AFT C.G.), DCMAPT

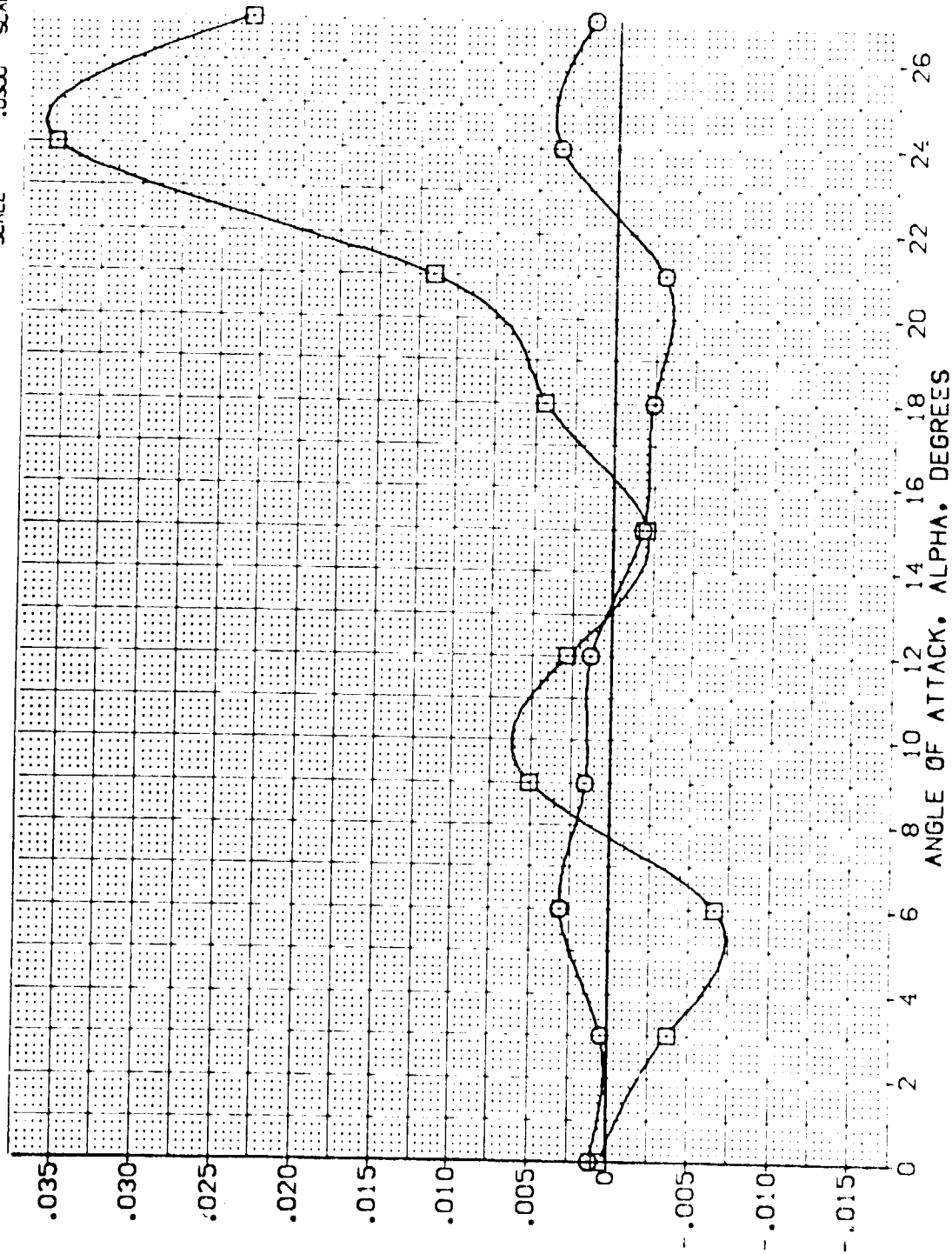


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(CD)MACH = .90

DATA SET SYMBOL: [VEJ050] [VEJ049]  
 CONFIGURATION DESCRIPTION: ARC 11-747 BA53A B C H F VI V  
 NOM: RVL SEAL.EL  
 NOM: RVL SEAL.EL  
 ELEVON: AILRON  
 AILRON: .000  
 .000  
 BOFLAP: 16.300  
 16.300  
 SPOBRK: 25.000  
 25.000  
 REFERENCE INFORMATION: SREF 2.4210 SQ.FT.  
 LREF 14.2440  
 BREF 28.100A  
 YMRP 32.3010  
 ZMRP .0000  
 SCALE 11.2500  
 .0300

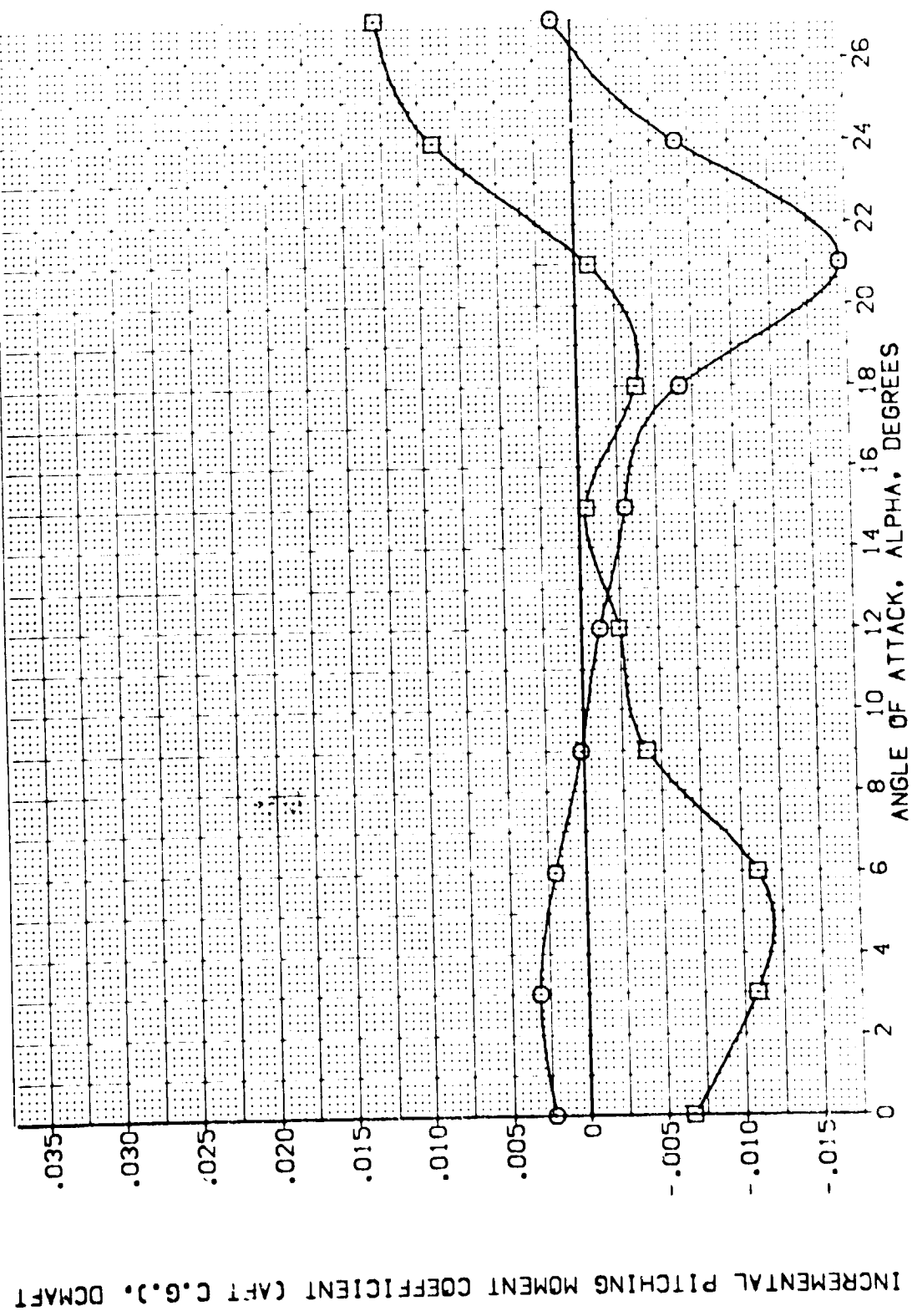


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(MACH = 1.05)

DATA SET SYMBOL: (VEJ050) (VEJ049)

CONFIGURATION DESCRIPTION: ARC 11-747 OA53A B C H F VI V  
ARC 11-747 OA53A B C H F VI V

ELEVON: .000 .000 .000

AIRLON: .000 .000 .000

BOFLAP: 15.300 15.300 15.300

SP00BK: 25.000 25.000 25.000

REFERENCE INFORMATION:

SREF: 2.4210 SQ.FT.

LREF: 14.2440

BREF: 28.1004

XMRP: 32.3010

YMRP: .0000

ZMRP: 11.2500

SCALE: .0300

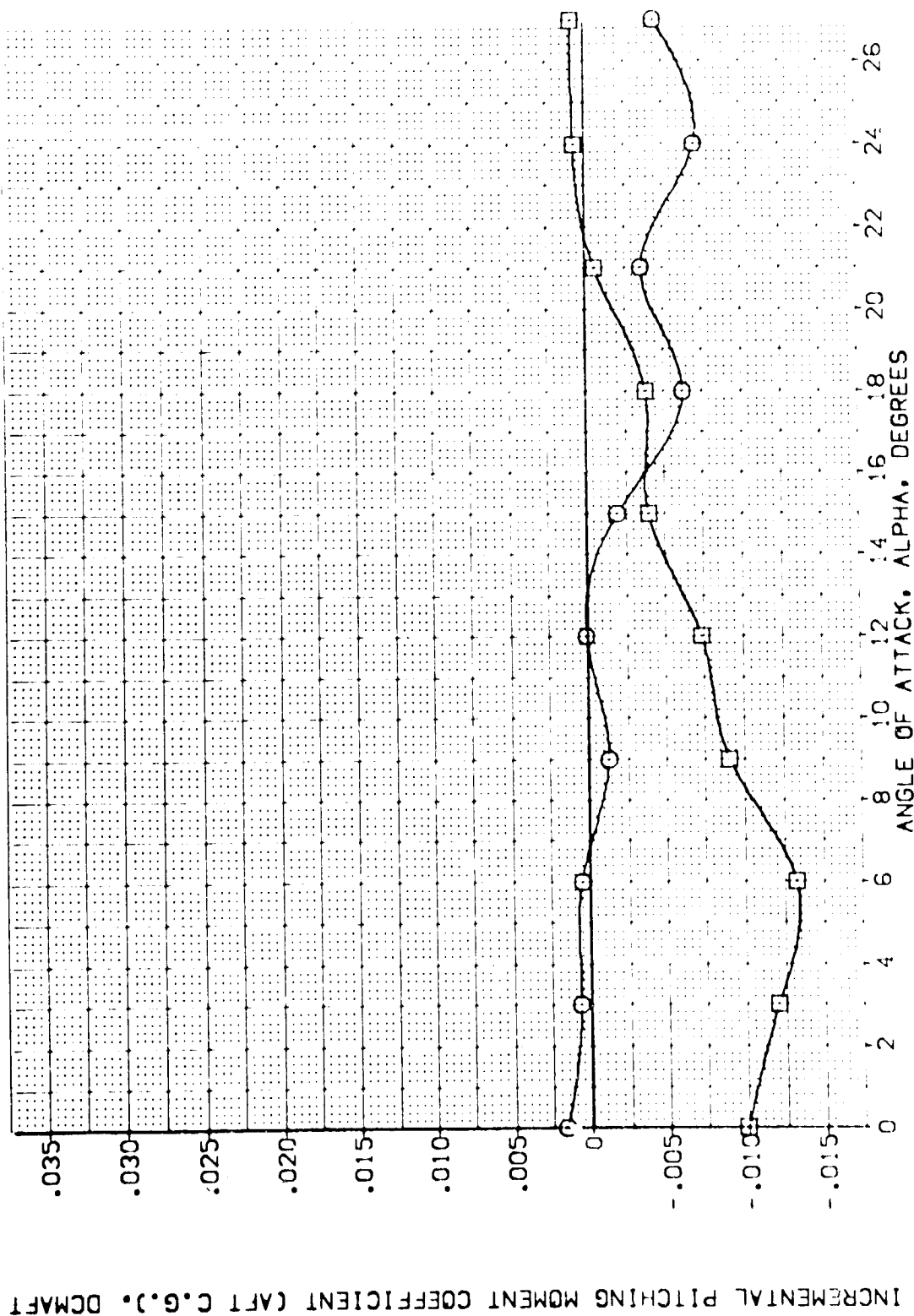


FIG. 10 SEALED ELEVON SPLIT EFFECTS

(E)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA, DEG	SPD, K	AIR, IN	REFERENCE INFORMATION
[AEJ012]	ARC 11-747 DA53A B C M F V1 V	.000	-11.700	25.000	.000	SREF 2.4210 SQ. FT.
[AEJ013]	ARC 11-747 DA53A B C M F V1 V	10.000	-11.700	25.000	.000	LREF 14.2440 IN.
[AEJ014]	ARC 11-747 DA53A B C M F V1 V	20.000	-11.700	25.000	.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

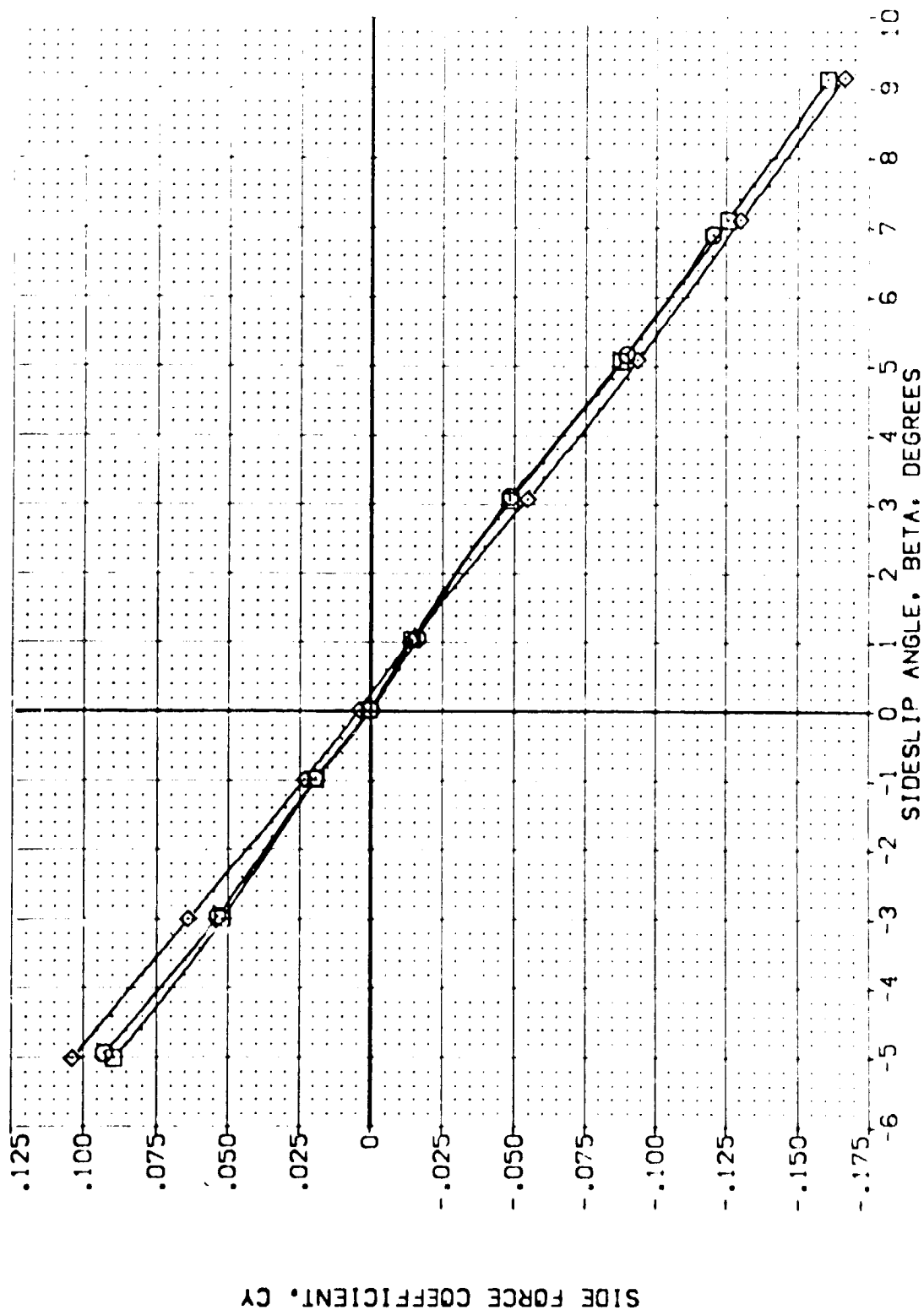


FIG. 11 LAT-DIR CHARACTERISTICS OF TOTAL VEHICLE-PART 1

(A)MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BOFLAP	SPDRBK	AILRON	REFERENCE INFORMATION
[AEJ012]	ARC 11-747 QAS3A B C M F V1 V	.000	-11.700	25.000	.000	SREF 2.4210 SQ.FT.
[AEJ013]	ARC 11-747 QAS3A B C M F V1 V	10.000	-11.700	25.000	.000	LREF 14.2440 IN.
[AEJ014]	ARC 11-747 QAS3A B C M F V1 V	20.000	-11.700	25.000	.000	BREF 28.1004 IN.
						XREF 32.3010 IN.
						YREF .0000 IN.
						ZREF 11.2500 IN.
						SCALE .0300

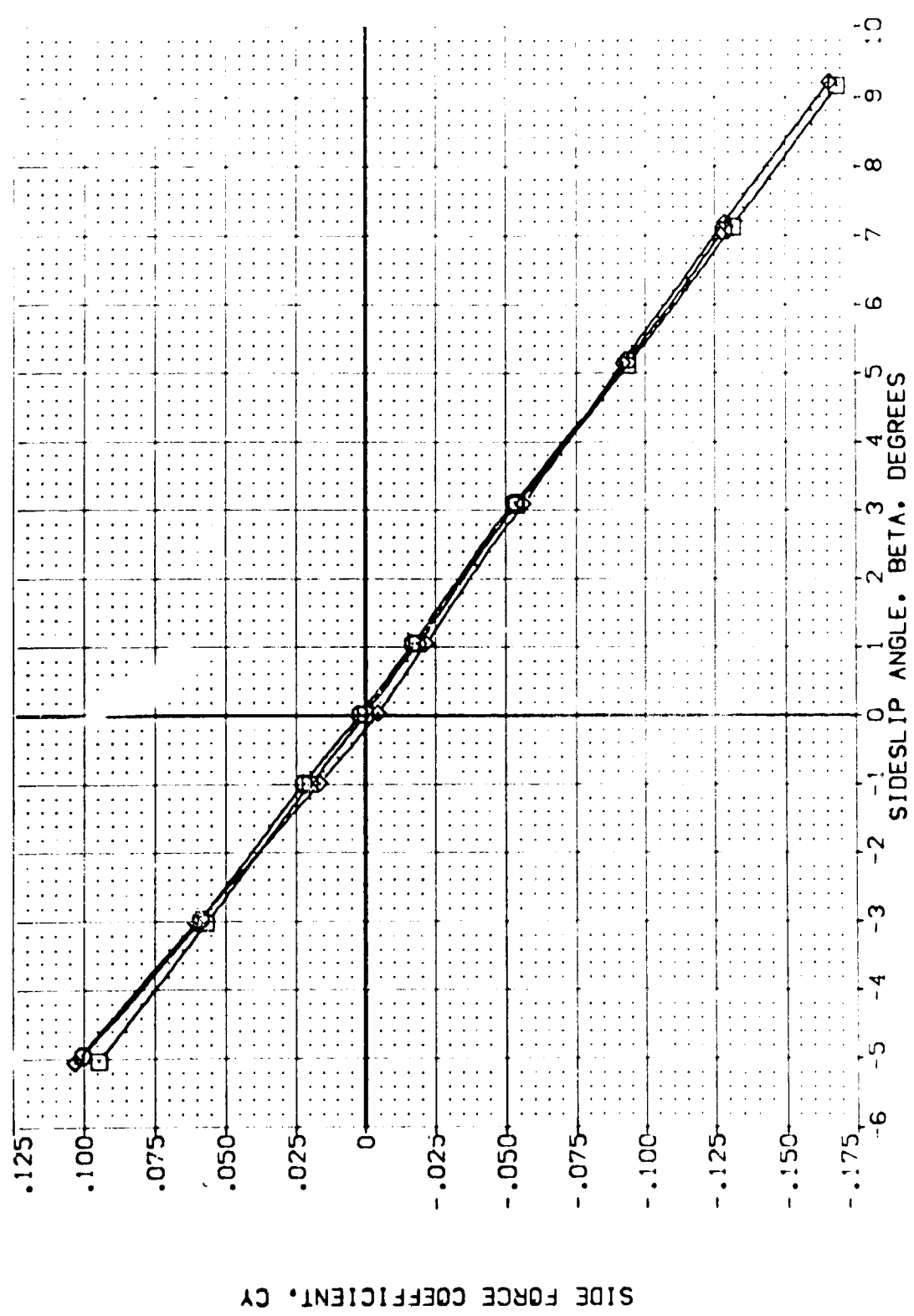


FIG. 11 LAT-DIR CHARACTERISTICS OF TOTAL VEHICLE-PART 1

(B)MACH = .80



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NON: RVAL	ALPHA	BDF LAP	SPDRBK	AIRLON	REFERENCE INFORMATION
(AEJ012)	ARC 11-747 DAS3A B C H F VI V	NON: RVAL	.000	-11.700	25.000	.000	SREF 2.4210 SQ.FT.
(AEJ013)	ARC 11-747 DAS3A B C H F VI V	NON: RVAL	10.000	-11.700	25.000	.000	LREF 14.2440 IN.
(AEJ014)	ARC 11-747 DAS3A B C H F VI V	NON: RVAL	20.000	-11.700	25.000	.000	BREF 28.1004 IN.
						.000	XMRP 32.3010 IN.
						.000	YMRP .0000 IN.
						.000	ZMRP 11.2500 IN.
						.000	SCALE 11.0300 IN.

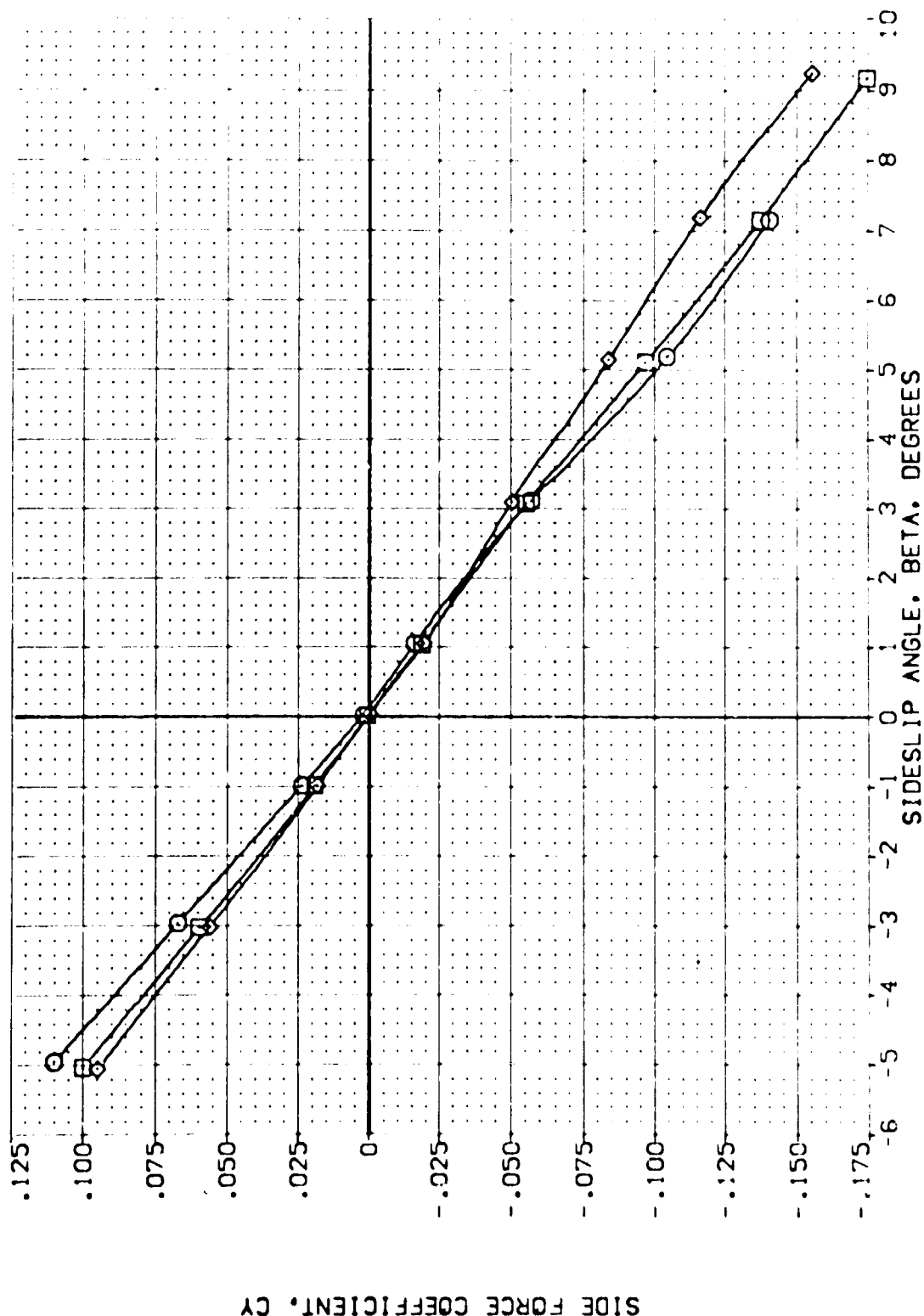


FIG. 11 LAT-DIR CHARACTERISTICS OF TOTAL VEHICLE-PART 1

(C)MACH = .90



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BD FLAP	SPOORK	AIRLON	REFERENCE INFORMATION
(ALJ012)	ARC 11-747 BAS3A B C H F VI V	.000	-11.700	25.000	.000	SREF 2.4210 SQ.FT.
(ALJ013)	ARC 11-747 BAS3A B C H F VI V	10.000	-11.700	25.000	.000	LREF 14.2440
(ALJ014)	ARC 11-747 BAS3A B C H F VI V	20.000	-11.700	25.000	.000	BREF 28.1004
						XMRP 32.3010
						YMRP .0000
						ZMRP .0000
						SCALE 11.2500
						SCALE .0300

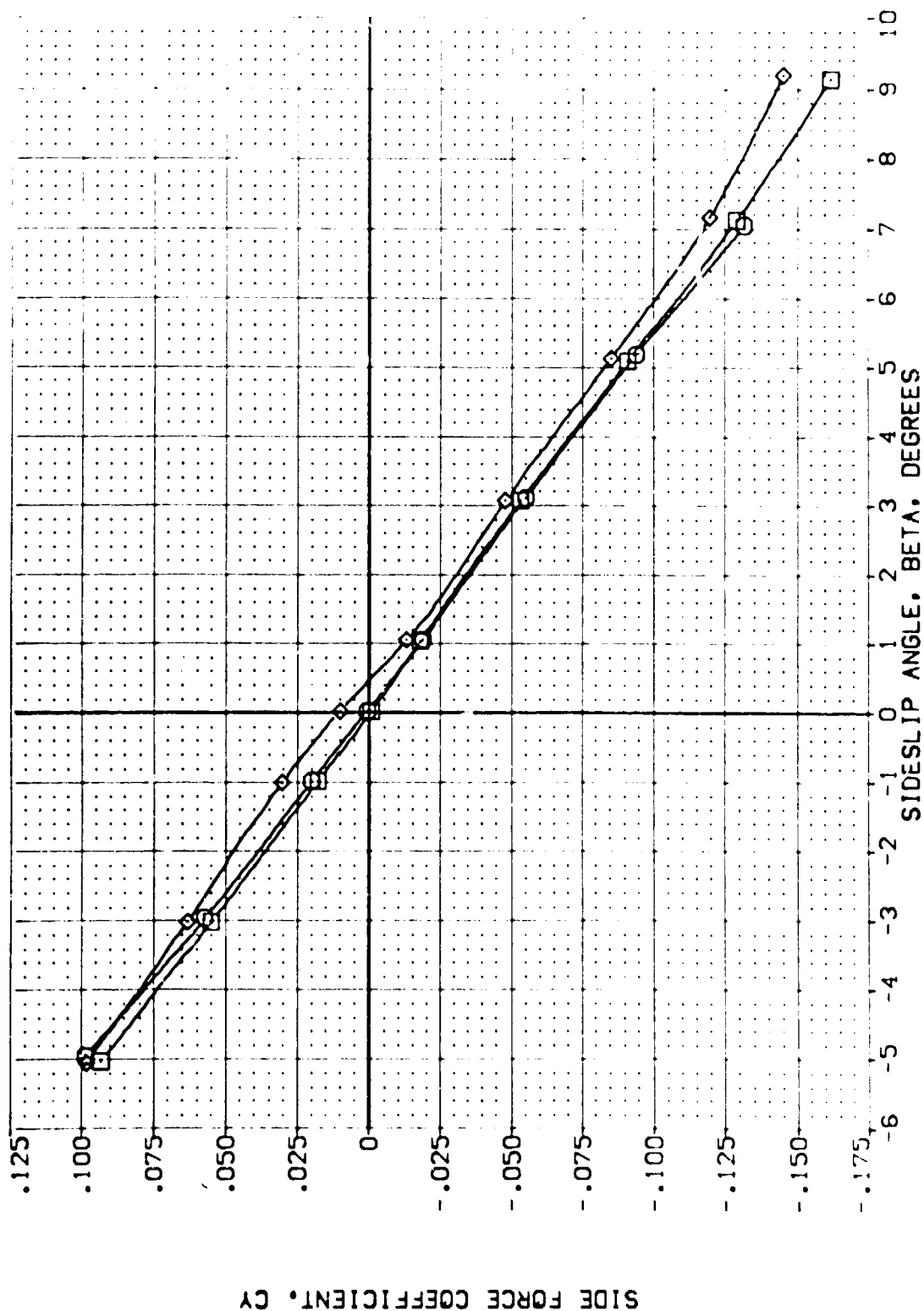


FIG. 11 LAT-DIR CHARACTERISTICS OF TOTAL VEHICLE-PART 1

(C)MACH = 1.05

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BD FLAP	SPD BRK	AIR LON	REFERENCE INFORMATION
(AEJ012)	○	ARC 11-747 DASSA B C H F V	.000	-11.700	25.000	.000	SREF 2.4210 SQ.FT.
(AEJ013)	○	ARC 11-747 DASSA B C H F V	10.000	-11.700	25.000	.000	LREF 14.2440 IN.
(AEJ014)	◇	ARC 11-747 DASSA B C H F V	20.000	-11.700	25.000	.000	BREF 28.1004 IN.
							XPRP 32.3010 IN.
							YPRP .0000 IN.
							ZPRP 11.2500 IN.
							SCALE .0300 SCALE

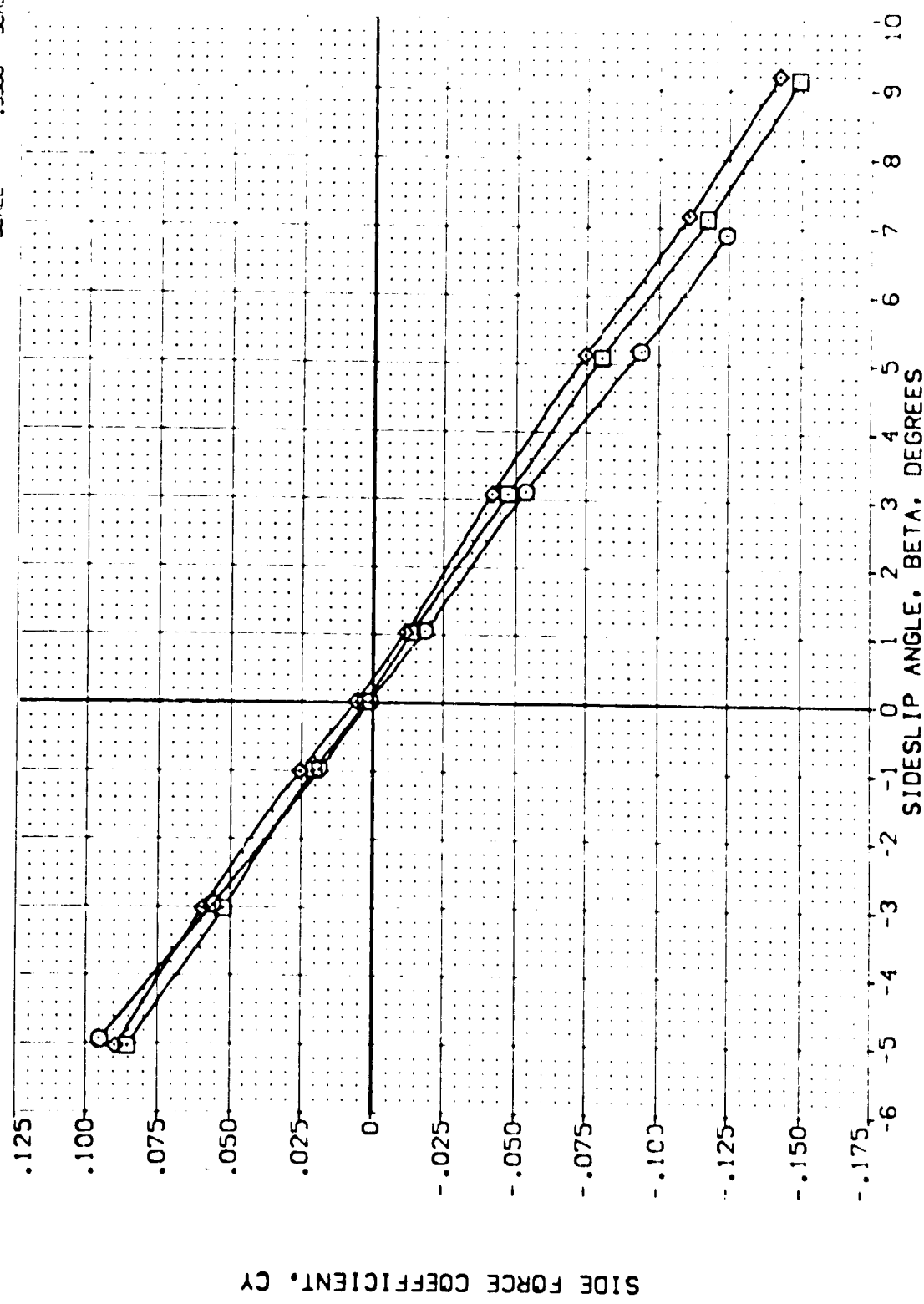


FIG. 11 LAT-DIR CHARACTERISTICS OF TOTAL VEHICLE-PART 1

(E)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BD FLAP	SPEED BRK	ALIGN	REFERENCE INFORMATION
(AE1012)	ARC 11-747 BA53A B C M F V1 V	.000	-11.700	25.000	.000	SREF 2.4210 SQ. FT.
(AE1013)	ARC 11-747 BA53A B C M F V1 V	10.000	-11.700	25.000	.000	REF 14.2440
(AE1014)	ARC 11-747 BA53A B C M F V1 V	20.000	-11.700	25.000	.000	BREF 29.1004
						XMRP 32.3010
						YMRP .0000
						ZMRP 11.2500
						SCALE .0300

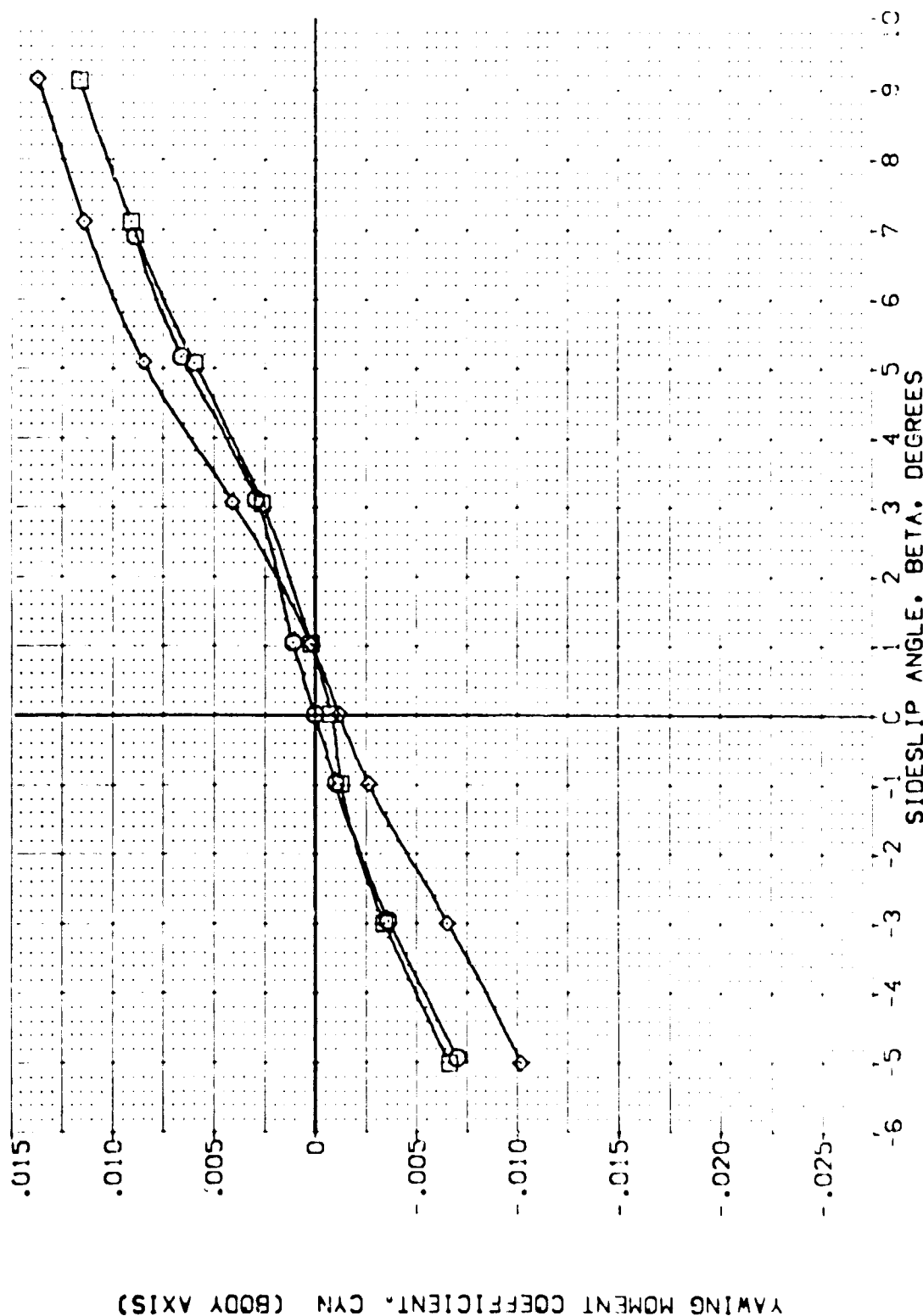


FIG. 11 LAT-DIR CHARACTERISTICS OF TOTAL VEHICLE-PART 1

(A) MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BOFLAP	SPODBK	AIRLON	REFERENCE INFORMATION
[AEJ012]	ARC 11-747 DA53A B C M F V1 V	.000	-11.700	25.000	.000	SREF 2.4210 SQ.FT.
[AEJ013]	ARC 11-747 DA53A B C M F V1 V	10.000	-11.700	25.000	.000	LREF 14.2440 IN.
[AEJ014]	ARC 11-747 DA53A B C M F V1 V	20.000	-11.700	25.000	.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

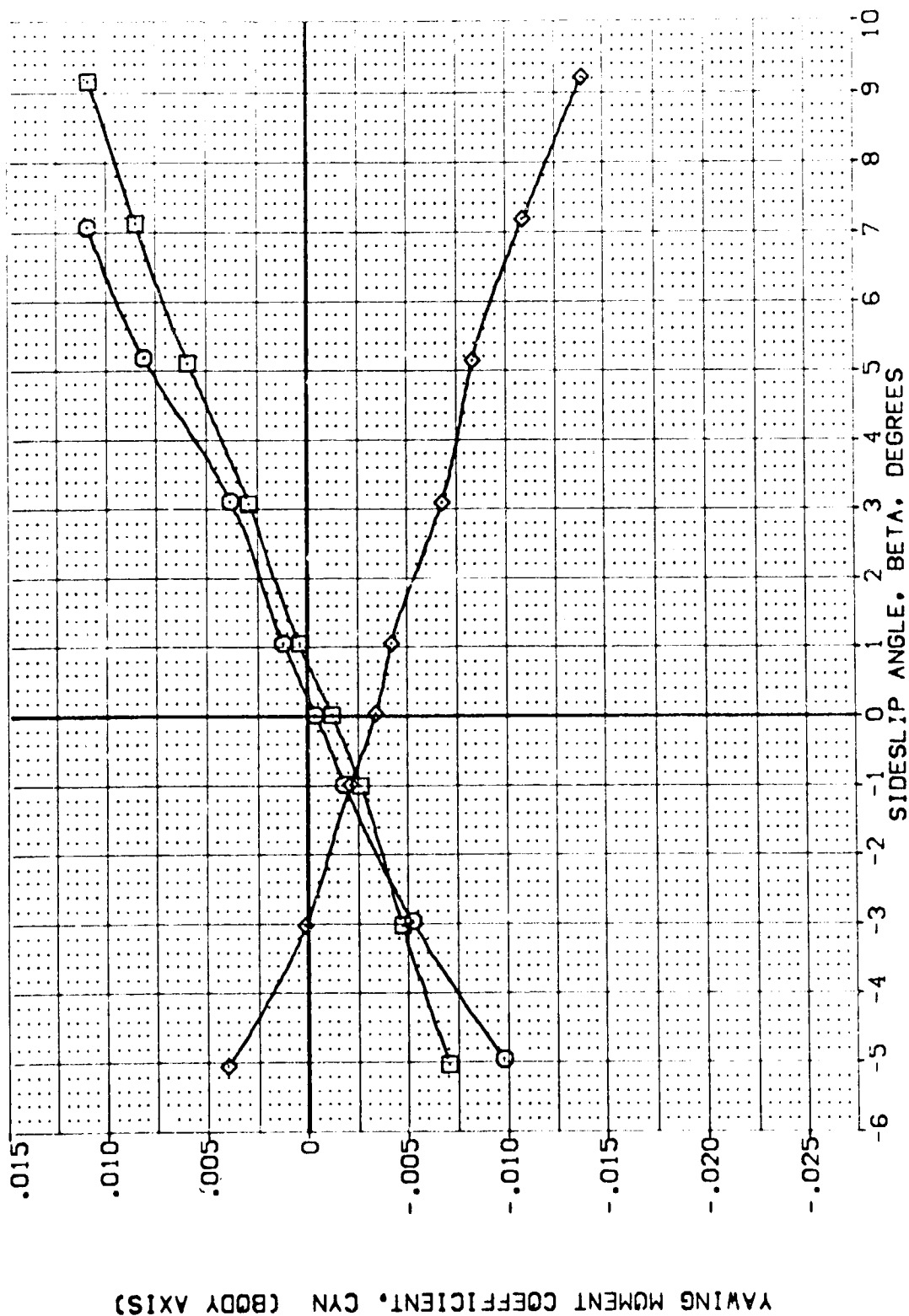


FIG. 11 LAT-DIR CHARACTERISTICS OF TOTAL VEHICLE-PART 1

(B)MACH = .80



YAWING MOMENT COEFFICIENT, CYN (BODY AXIS)

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BDFLAP	SPRBERK	AIRLORN	REFERENCE INFORMATION
(AEJ012)	ARC 11-747 DAS3A B C M F V1	.000	-11.700	25.000	.000	SREF 2.4210 SQ.FT.
(AEJ013)	ARC 11-747 DAS3A B C M F V1	10.000	-11.700	25.000	.000	LREF 14.7440 IN.
(AEJ014)	ARC 11-747 DAS3A B C M F V1	20.000	-11.700	25.000	.000	BREF 28.1004 IN.
						YMRP .0000 IN.
						ZMRP .0000 IN.
						SCALE 11.2500 IN.
						SCALE .0300 IN.

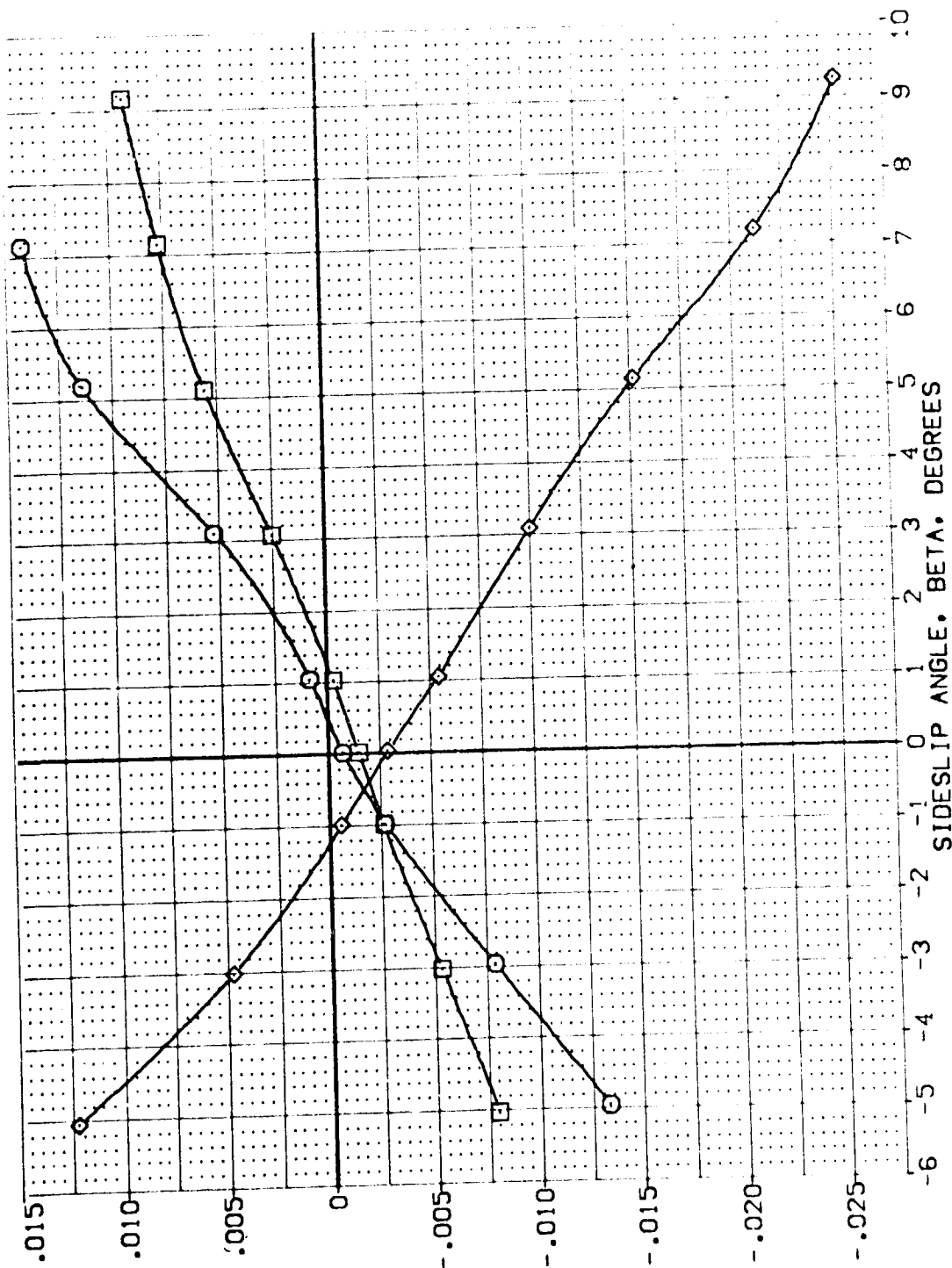


FIG. 11 LAT-DIR CHARACTERISTICS OF TOTAL VEHICLE-PART 1

(C)MACH = .90

DATA SET SYMBOL: (AEJ012) (AEJ013) (AEJ014)

CONFIGURATION DESCRIPTION: ARC 11-747 OA53A B C M F VI V NOM: RV/L  
 ARC 11-747 OA53A B C M F VI V NOM: RV/L  
 ARC 11-747 OA53A B C M F VI V NOM: RV/L

ALPHA: .000 10.000 20.000

BDFLAP: -11.700 -11.700 -11.700

SPOBRK: 25.000 25.000 25.000

AILRON: .000 .000 .000

REFERENCE INFORMATION: SREF 2.4210 SQ.FT.  
 LREF 14.2440 IN.  
 BREF 28.1004 IN.  
 XMRP 32.3010 IN.  
 YMRP .0000 IN.  
 ZMRP 11.2500 IN.  
 SCALE .0300

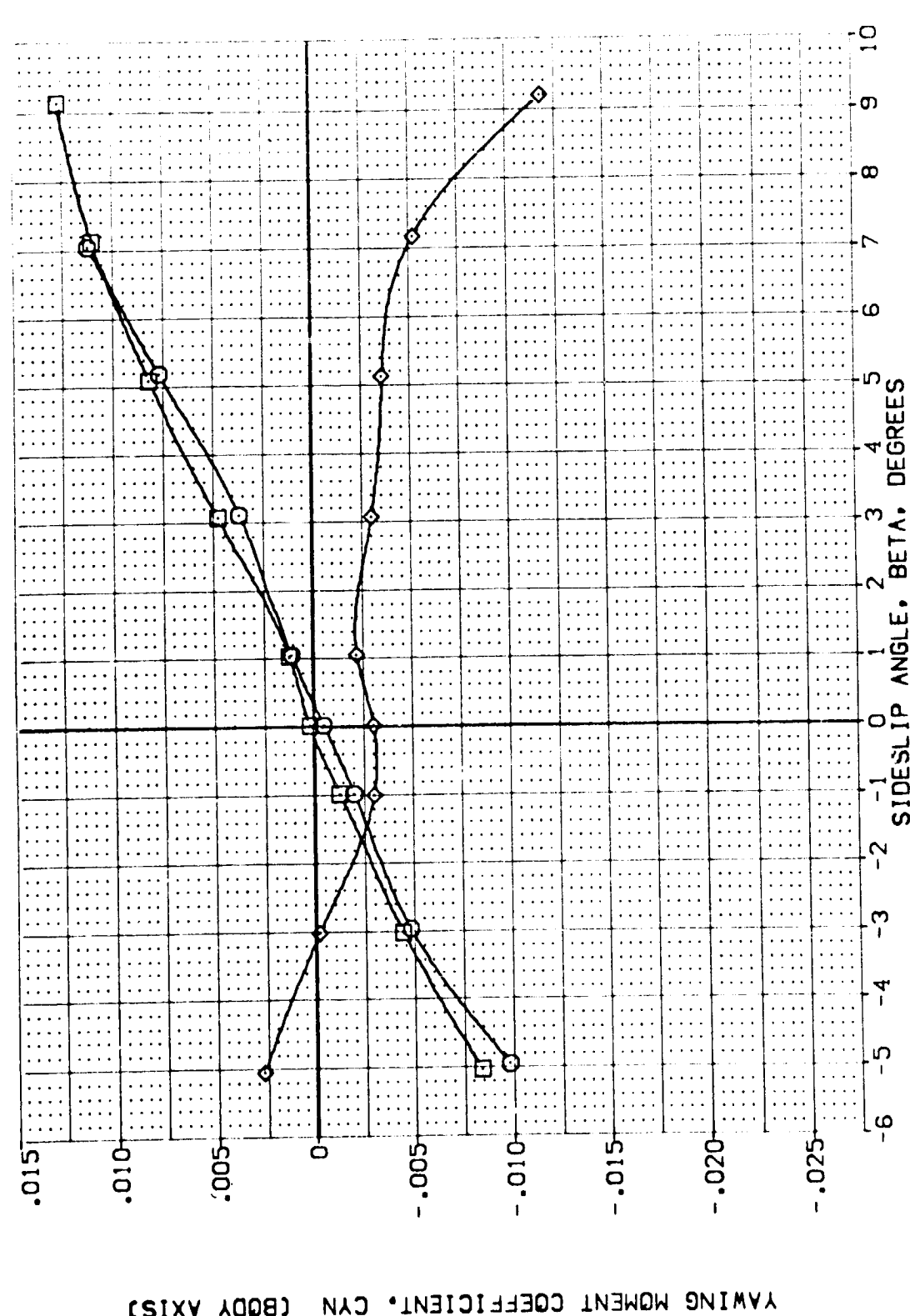


FIG. 11 LAT-DIR CHARACTERISTICS OF TOTAL VEHICLE-PART 1

(D)MACH = 1.05



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NDM: R/V/L	NDM: R/V/L	ALPHA	BDF LAP	SPOBRK	AIRRON	REFERENCE INFORMATION
(AEJ012)	ARC 11-747 QAS3A B C M F VI V	NDM: R/V/L	NDM: R/V/L	.000	-11.700	25.000	.000	SREF 2.4210 SQ.FT.
(AEJ013)	ARC 11-747 QAS3A B C M F VI V	NDM: R/V/L	NDM: R/V/L	10.000	-11.700	25.000	.000	LREF 14.2440 IN.
(AEJ014)	ARC 11-747 QAS3A B C M F VI V	NDM: R/V/L	NDM: R/V/L	20.000	-11.700	25.000	.000	BREF 28.1004 IN.
								XMRP 32.3010 IN.
								YMRP .0000 IN.
								ZMRP 11.2500 IN.
								SCALE .0300

YAWING MOMENT COEFFICIENT, CYN (BODY AXIS)

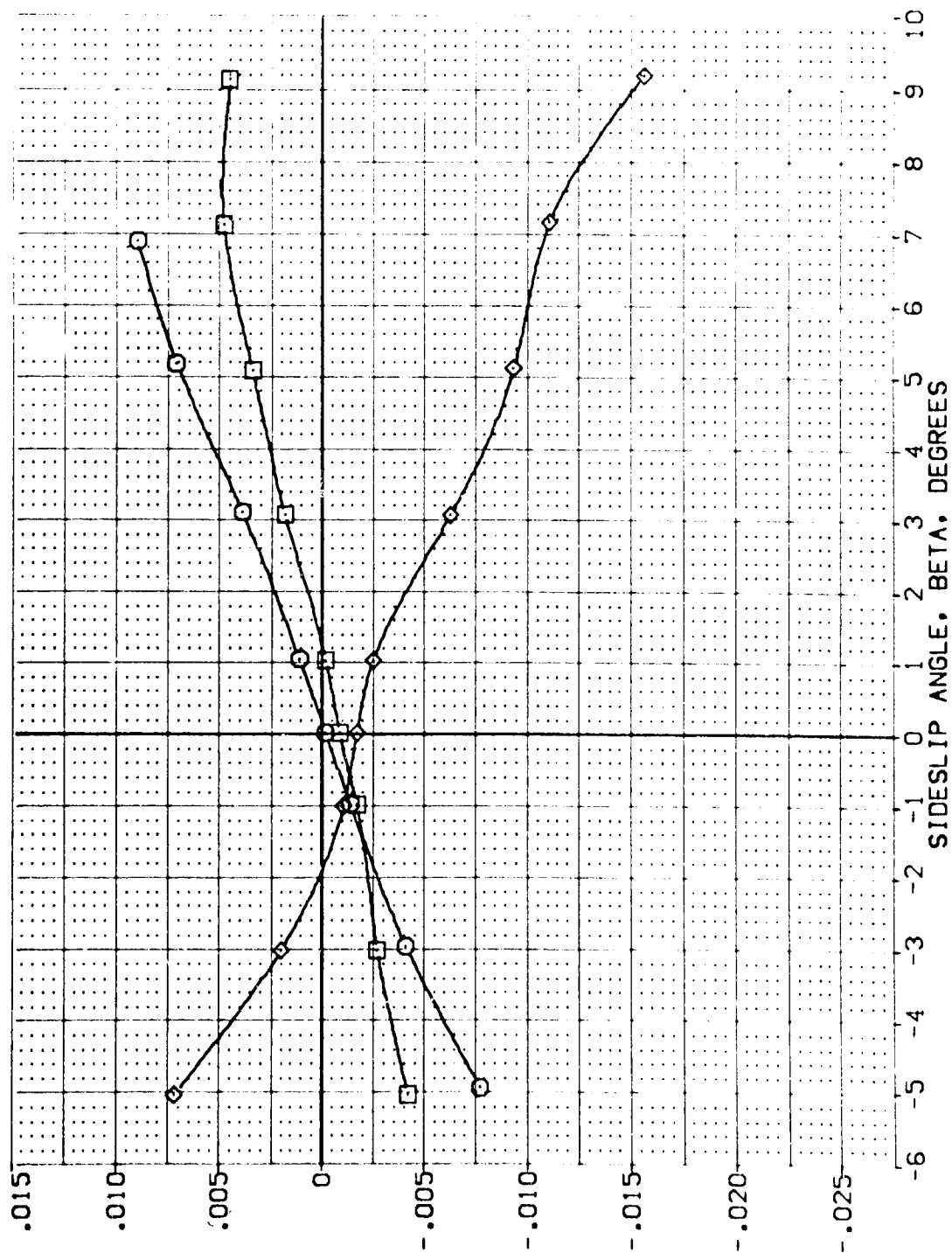


FIG. 11 LAT-DIR CHARACTERISTICS OF TOTAL VEHICLE-PART 1

(E)MACH = 1.20

DATA SET SYMBOL CONFIGURATION DESCRIPTION

[AEJ012] ARC 11-747 DAS3A B C M F VI V

[AEJ013] ARC 11-747 DAS3A B C M F VI V

[AEJ014] ARC 11-747 DAS3A B C M F VI V

REFERENCE INFORMATION

SREF 2.4210 SQ.FT.

LREF 14.2440 IN.

BREF 28.1004 IN.

YMRP 32.3010 IN.

ZMRP .0000 IN.

SCALE 11.2500 IN.

ALPHA

.000

10.000

20.000

BDFLAP

-11.700

-11.700

-11.700

SPDRBK

25.000

25.000

25.000

AILRON

.000

.000

.000

ROLLING MOMENT COEFFICIENT, CBL (BODY AXIS)

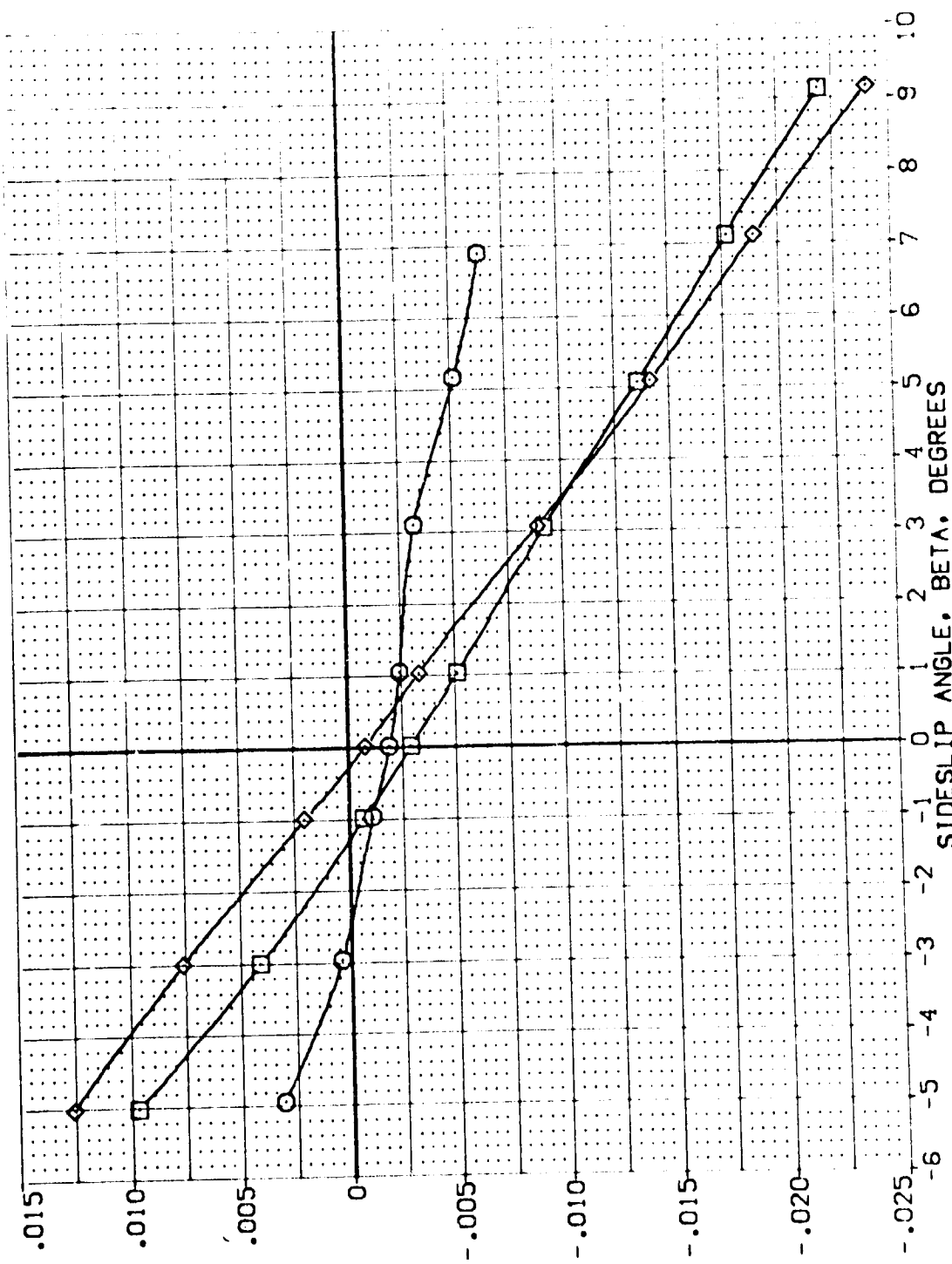
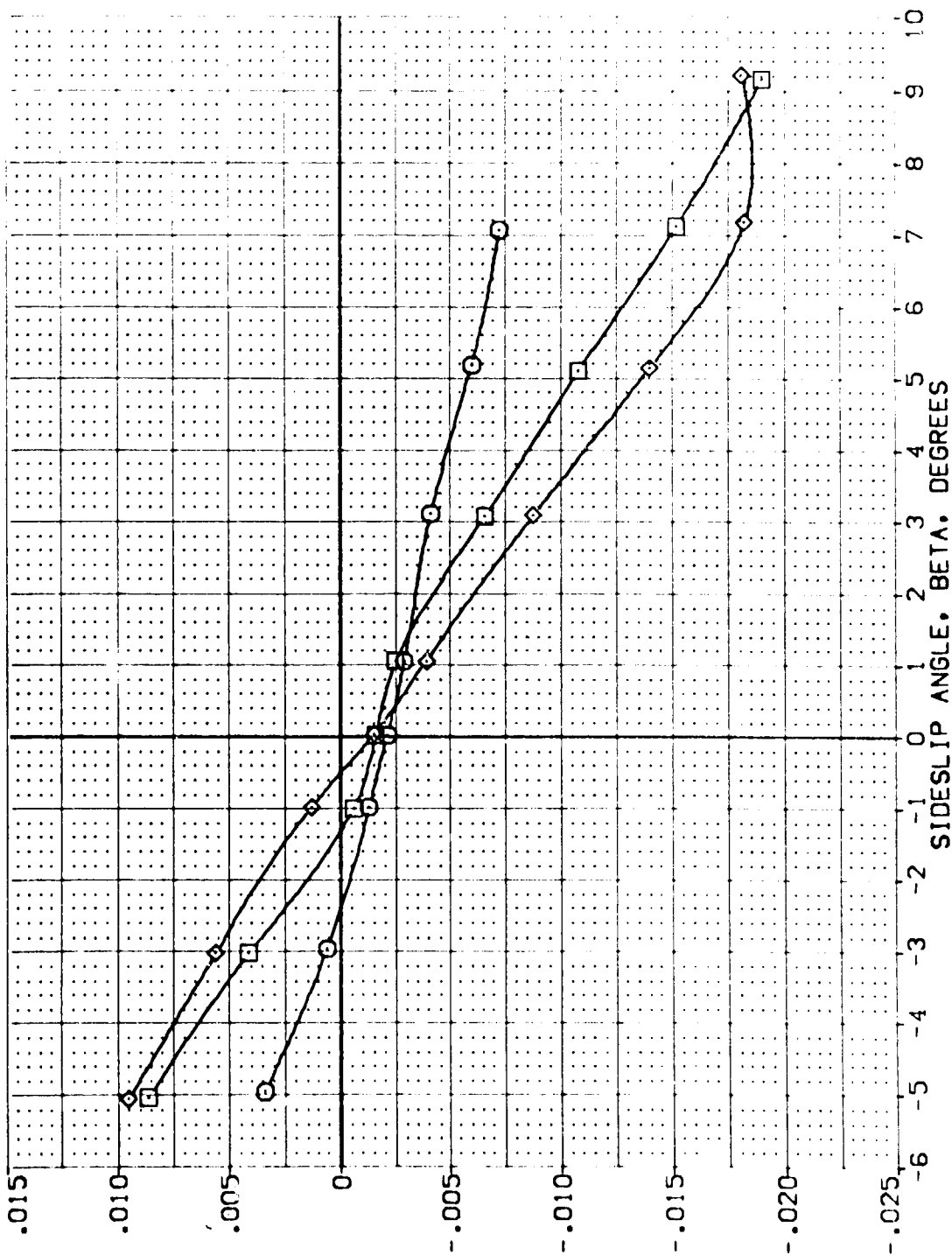


FIG. 11 LAT-DIR CHARACTERISTICS OF TOTAL VEHICLE-PART 1

(A)MACH = .60



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BOFLAP	SPOBRK	AIRRON	REFERENCE INFORMATION
(AE7012)	ARC 11-747 OAS3A B C M F VI V	.000	-11.700	25.000	.000	SREF 2.4210 50. FT.
(AE7013)	ARC 11-747 OAS3A B C M F VI V	10.000	-11.700	25.000	.000	LREF 14.2440 IN.
(AE7014)	ARC 11-747 OAS3A B C M F VI V	20.000	-11.700	25.000	.000	BREF 26.1004 IN.
						XMRP 32.3010 IN.
						YI .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300



ROLLING MOMENT COEFFICIENT, CBL (BODY AXIS)

FIG. 11 LAT-DIR CHARACTERISTICS OF TOTAL VEHICLE-PART 1

(B)MACH = .80

DATA SET SYMB.	CONFIGURATION DESCRIPTION	ALPHA	BDFLAP	SPOBRK	AIRLON	REFERENCE INFORMATION
{AEJ012}	ARC 11-747 DA53A B C M F V1 V	.000	-11.700	25.000	.000	SREF 2.4210 SQ.FT.
{AEJ013}	ARC 11-747 DA53A B C M F V1 V	10.000	-11.700	25.000	.000	LREF 14.2440
{AEJ014}	ARC 11-747 DA53A B C M F V1 V	20.000	-11.700	25.000	.000	BREF 28.1004
						XMRP 32.3010
						YMRP .0000
						ZMRP .0000
						SCALE 11.2500
						SCALE .0300

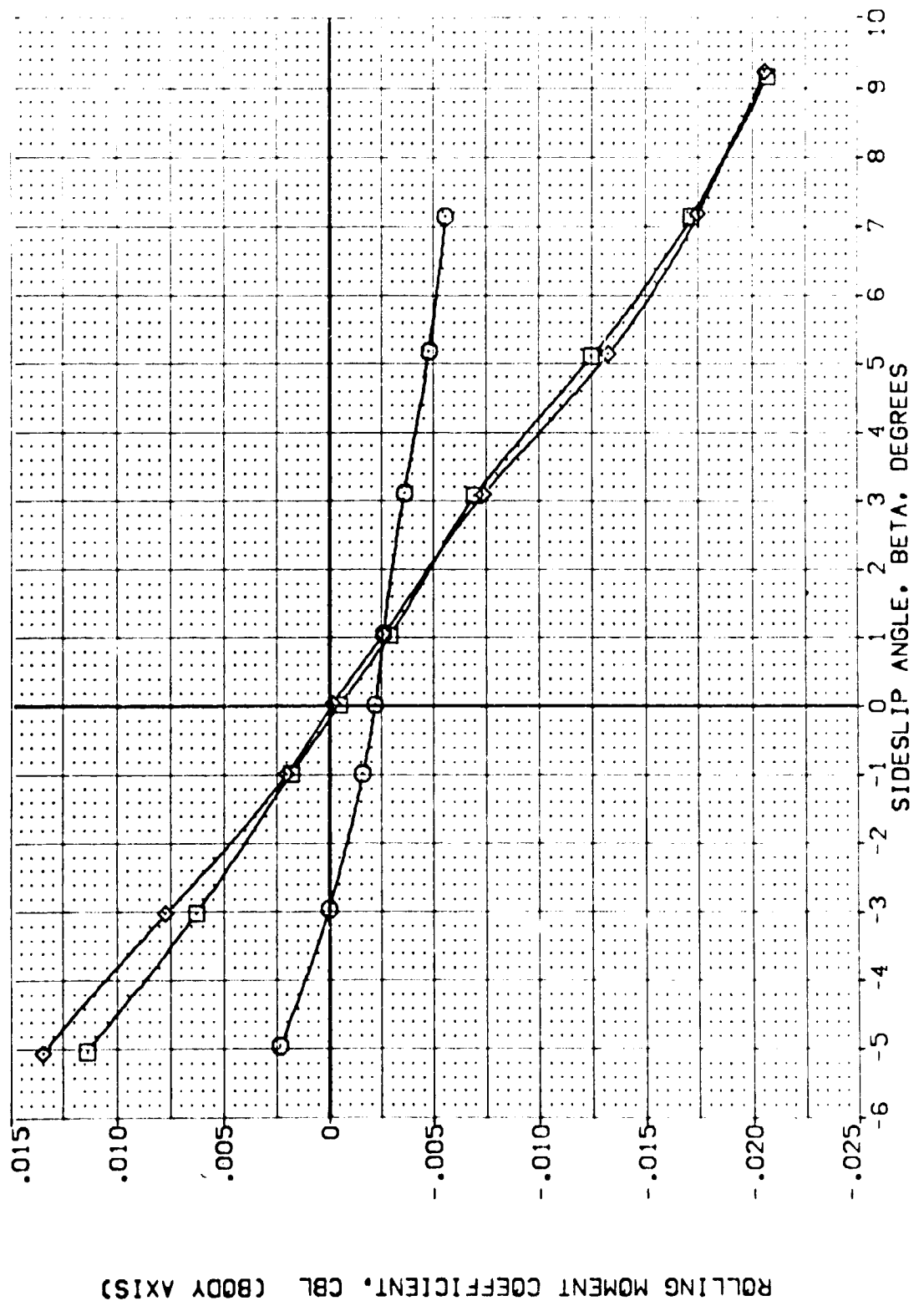


FIG. 11 LAT-DIR CHARACTERISTICS OF TOTAL VEHICLE-PART 1

{C}MACH = .90

DATA SET SYMBOL CONFIGURATION DESCRIPTION

[AEJ012] ARC 11-747 CAS3A B C H F VI V  
 [AEJ013] ARC 11-747 CAS3A B C H F VI V  
 [AEJ014] ARC 11-747 CAS3A B C H F VI V

ALPHA

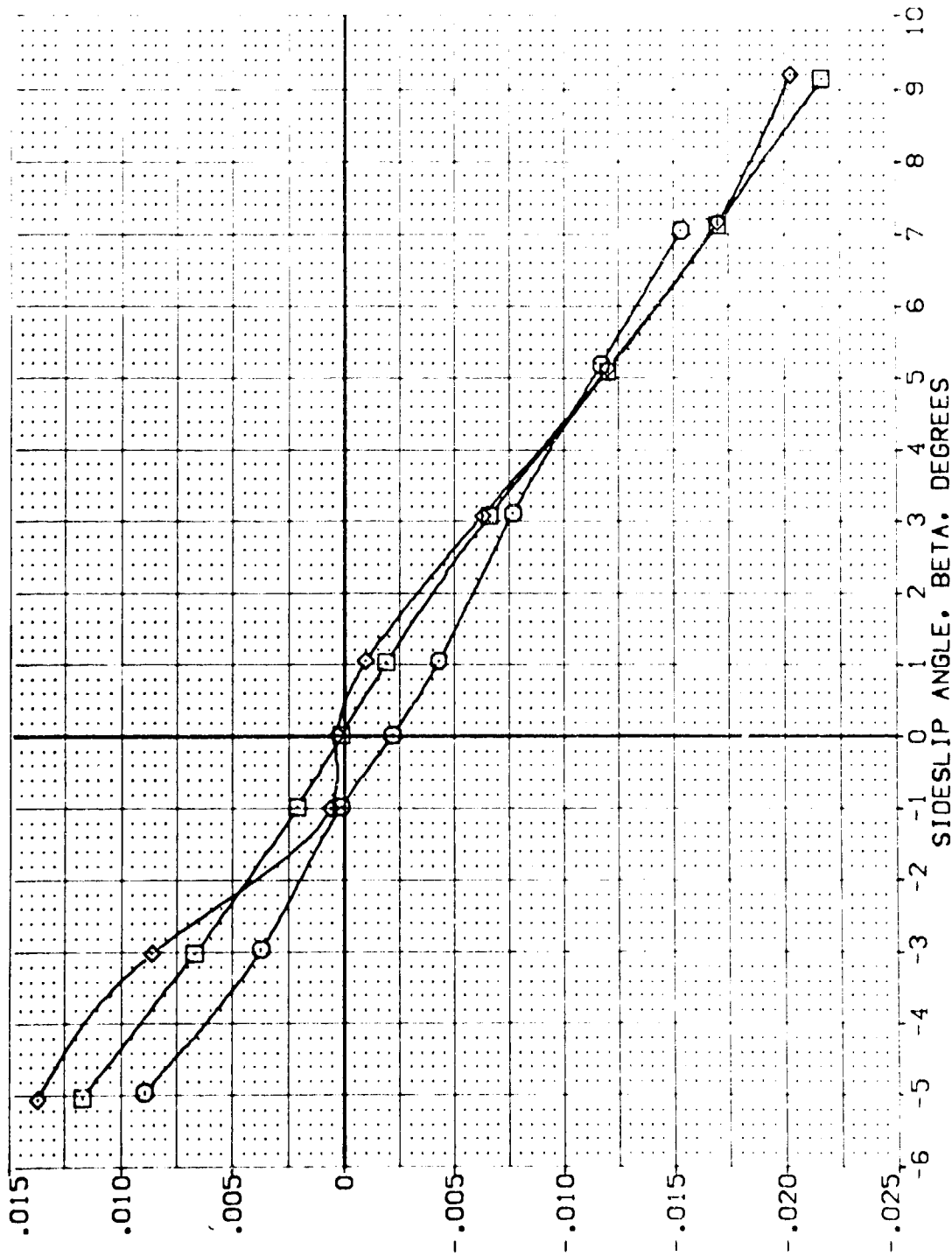
AILRON

SPOBRK

BDFLAP

NON: RV/L  
 NON: RV/L  
 NON: RV/L

REFERENCE INFORMATION  
 SREF 2.4210 SQ.FT.  
 LREF 14.2440 IN.  
 BREF 28.1004 IN.  
 YMRP 32.3010 IN.  
 ZMRP .0000 IN.  
 SCALE 11.2500 IN.  
 .0300



ROLLING MOMENT COEFFICIENT, CBL (BODY AXIS)

FIG. 11 LAT-DIR CHARACTERISTICS OF TOTAL VEHICLE-PART 1

(C)MACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BDF LAP	SPOBRK	AIRLON	REFERENCE INFORMATION
(AEJ012)	ARC 11-747 DAS3A B C H F VI V	.000	-11.700	25.000	.000	SREF 2.4210 SQ.FT.
(AEJ013)	ARC 11-747 DAS3A B C H F VI V	10.000	-11.700	25.000	.000	LREF 14.2440 IN.
(AEJ014)	ARC 11-747 DAS3A B C H F VI V	20.000	-11.700	25.000	.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

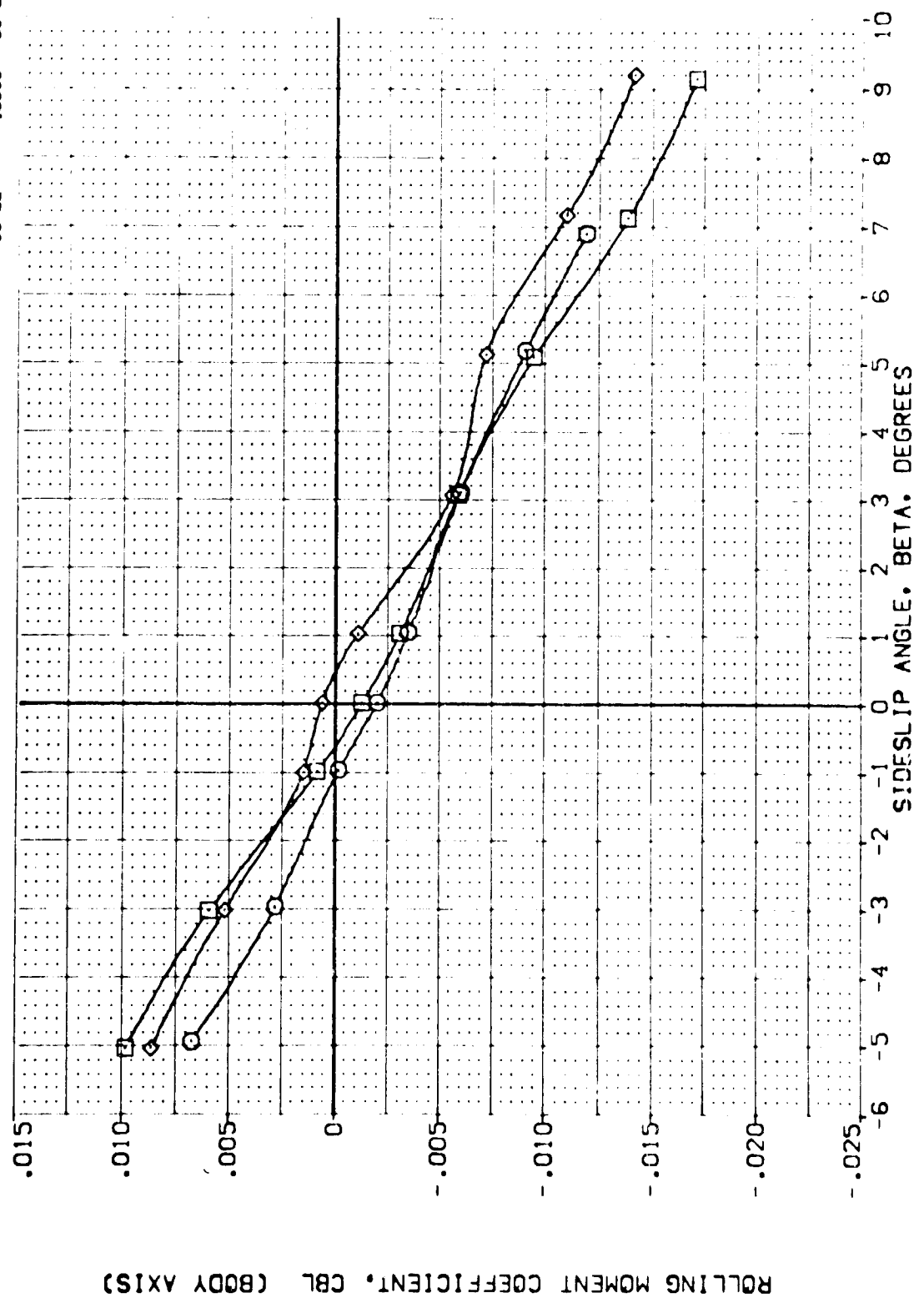


FIG. 11 LAT-DIR CHARACTERISTICS OF TOTAL VEHICLE-PART 1

(E)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BOFLAP	SPOBRK	AIRLON	REFERENCE INFORMATION
(AEJ025)	ARC 11-747 QAS3A B C H F V1 V	0.000	-11.700	55.000	.000	SREF 2.4210 SQ.FT.
(AEJ026)	ARC 11-747 QAS3A B C H F V1 V	10.000	-11.700	55.000	.000	LREF 14.2440 IN.
(AEJ027)	ARC 11-747 QAS3A B C H F V1 V	20.000	-11.700	55.000	.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

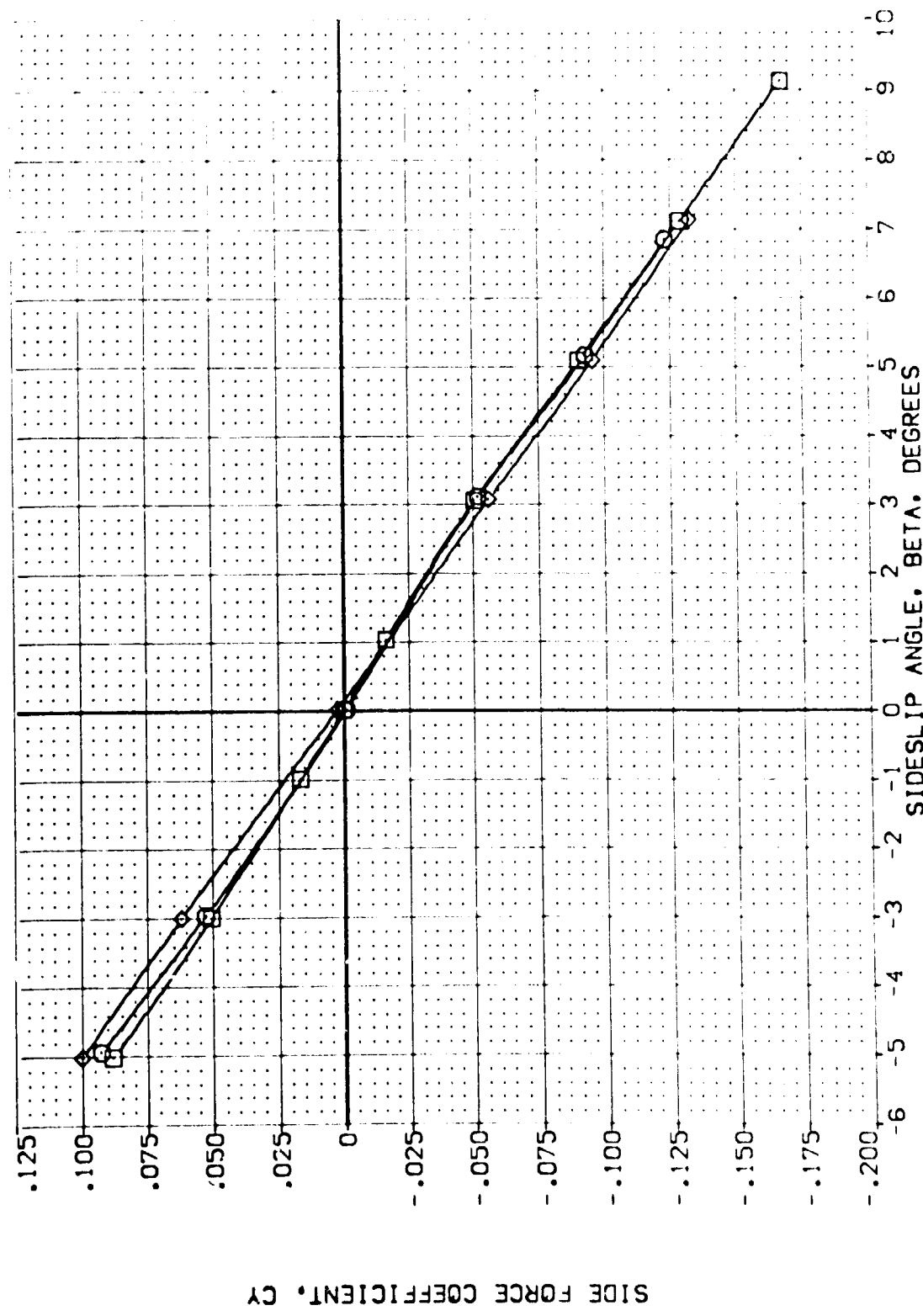


FIG. 12 LAT-DIR CHARACTERISTICS OF TOTAL VEHICLE-PART 2

(A) MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BDFLAP	SPOBRK	ATLRON	REFERENCE INFORMATION
(AEJ025)	ARC 11-747 BAS3A B C M F VI V	.000	-11.700	55.000	.000	SREF 2.4210 SQ.FT.
(AEJ026)	ARC 11-747 BAS3A B C M F VI V	10.000	-11.700	55.000	.000	LREF 14.2440 IN.
(AEJ027)	ARC 11-747 BAS3A B C M F VI V	20.000	-11.700	55.000	.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

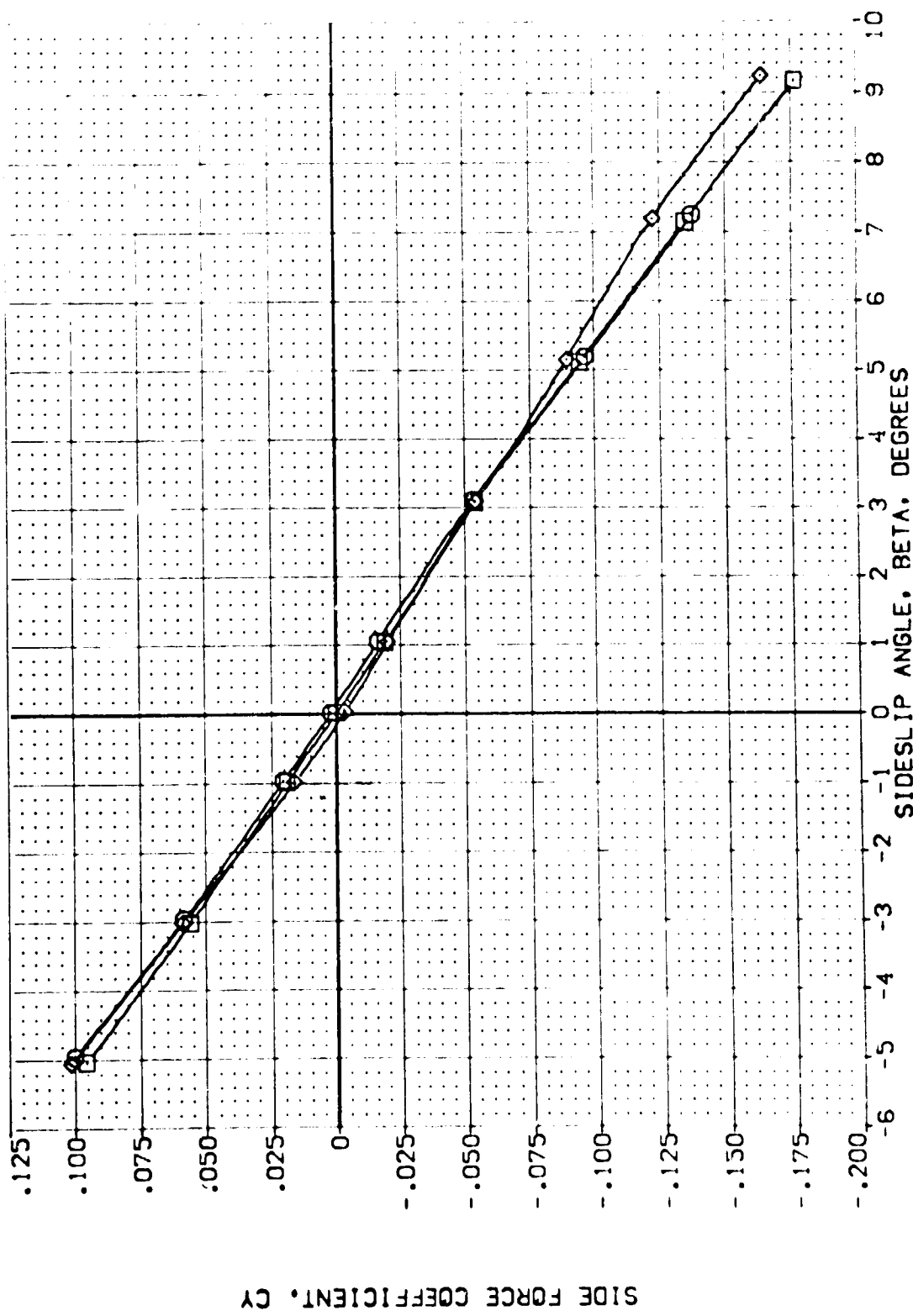


FIG. 12 LAT-DIR CHARACTERISTICS OF TOTAL VEHICLE-PART 2

(B)MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BOFLAP	SPOBRK	AIRLON	REFERENCE INFORMATION
(AEJ025)	ARC 11-747 BAS3A B C M F V1 V	.000	-11.700	55.000	.000	SREF 2.4210 SQ.FT.
(AEJ026)	ARC 11-747 BAS3A B C M F V1 V	10.000	-11.700	55.000	.000	LREF 14.2440 IN.
(AEJ027)	ARC 11-747 BAS3A B C M F V1 V	20.000	-11.700	55.000	.000	BREF 28.1004 IN.
						VMRP 32.3010 IN.
						ZMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

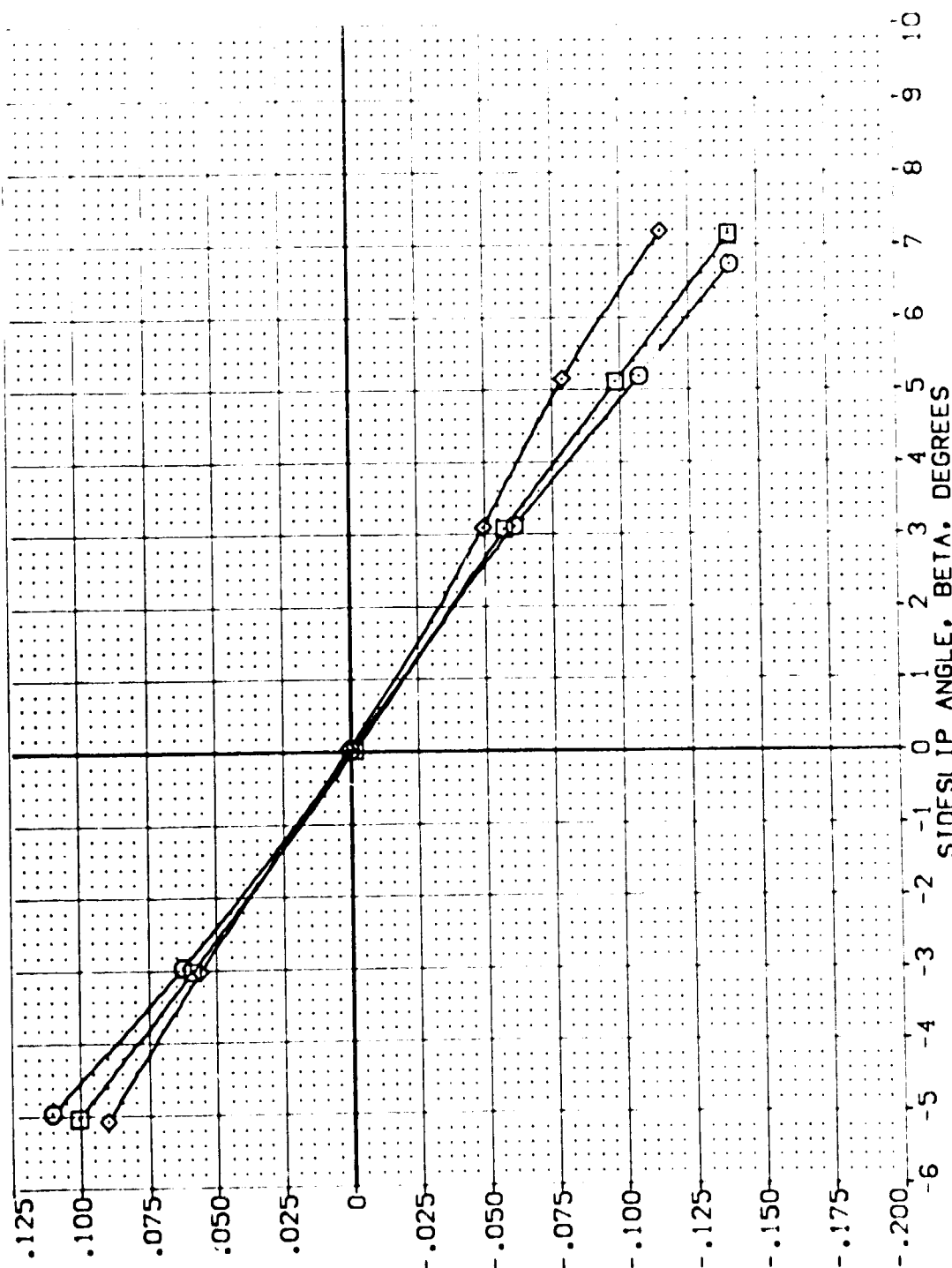


FIG. 12 LAT-DIR CHARACTERISTICS OF TOTAL VEHICLE-PART 2

(C)MACH = .90



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BDF LAP	SPDRBK	ATLRON	REFERENCE INFORMATION
[AEJ0275]	ARC 11-747 BAS3A B C H F VI V	.000	-11.700	55.000	.000	SREF 2.4210 SQ.FT.
[AEJ0276]	ARC 11-747 BAS3A B C H F VI V	10.000	-11.700	55.000	.000	LREF 14.2440 IN.
[AEJ0277]	ARC 11-747 BAS3A B C H F VI V	20.000	-11.700	55.000	.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

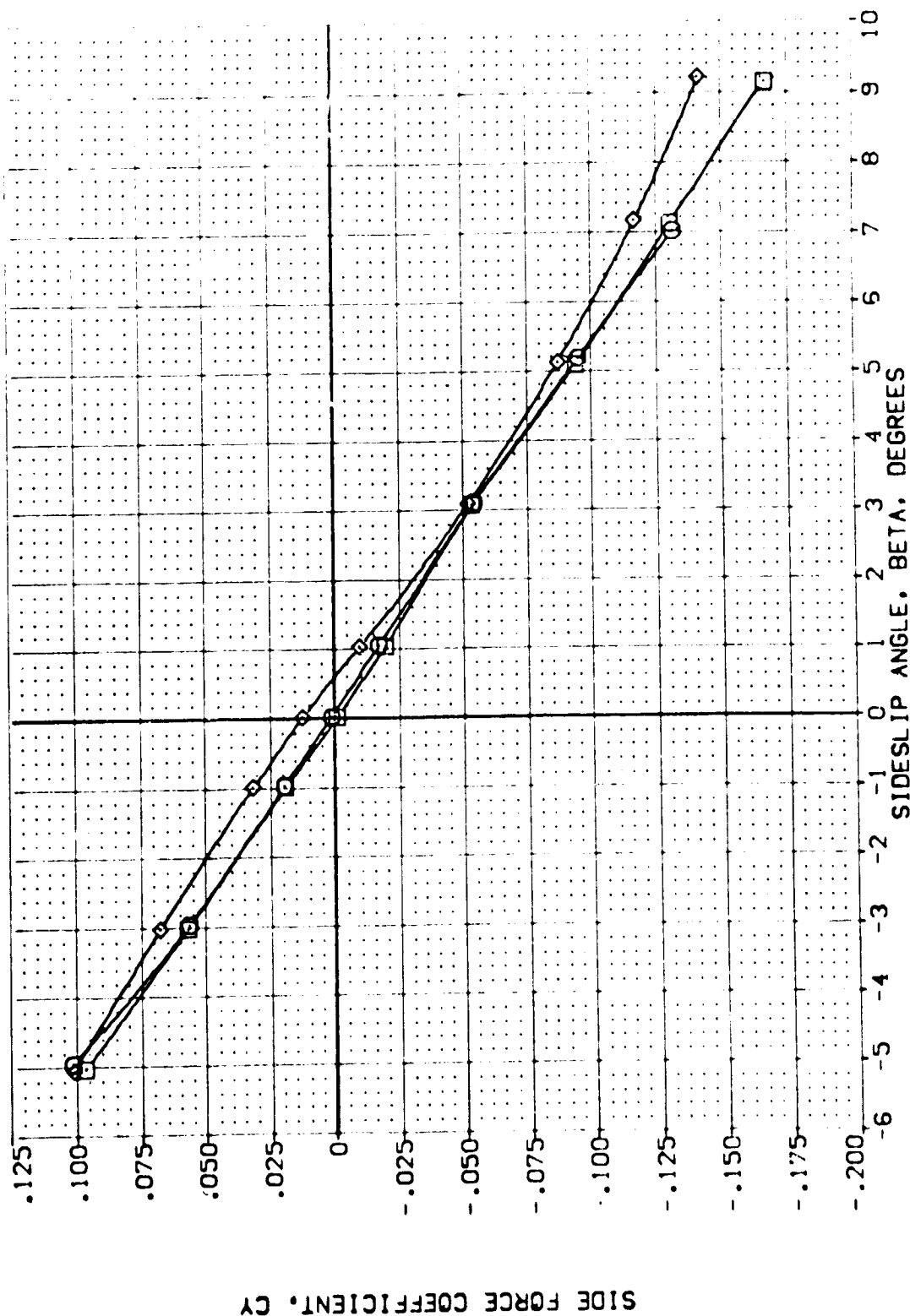


FIG. 12 LAT-DIR CHARACTERISTICS OF TOTAL VEHICLE-PART 2

(O)MACH = 1.05



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BD FLAP	SPOBRK	AIRLON	REFERENCE INFORMATION
(AEJ0275)	ARC 11-747 D453A B C M F V1 V	.000	-11.700	55.000	.000	SREF 2.4210 SQ.FT.
(AEJ0276)	ARC 11-747 D453A B C M F V1 V	10.000	-11.700	55.000	.000	LREF 14.2440 IN.
(AEJ0277)	ARC 11-747 D453A B C M F V1 V	20.000	-11.700	55.000	.000	BREF 28.1004 IN.
						XTRP 32.3010 IN.
						YTRP .0000 IN.
						ZTRP 11.2500 IN.
						SCALE .0300

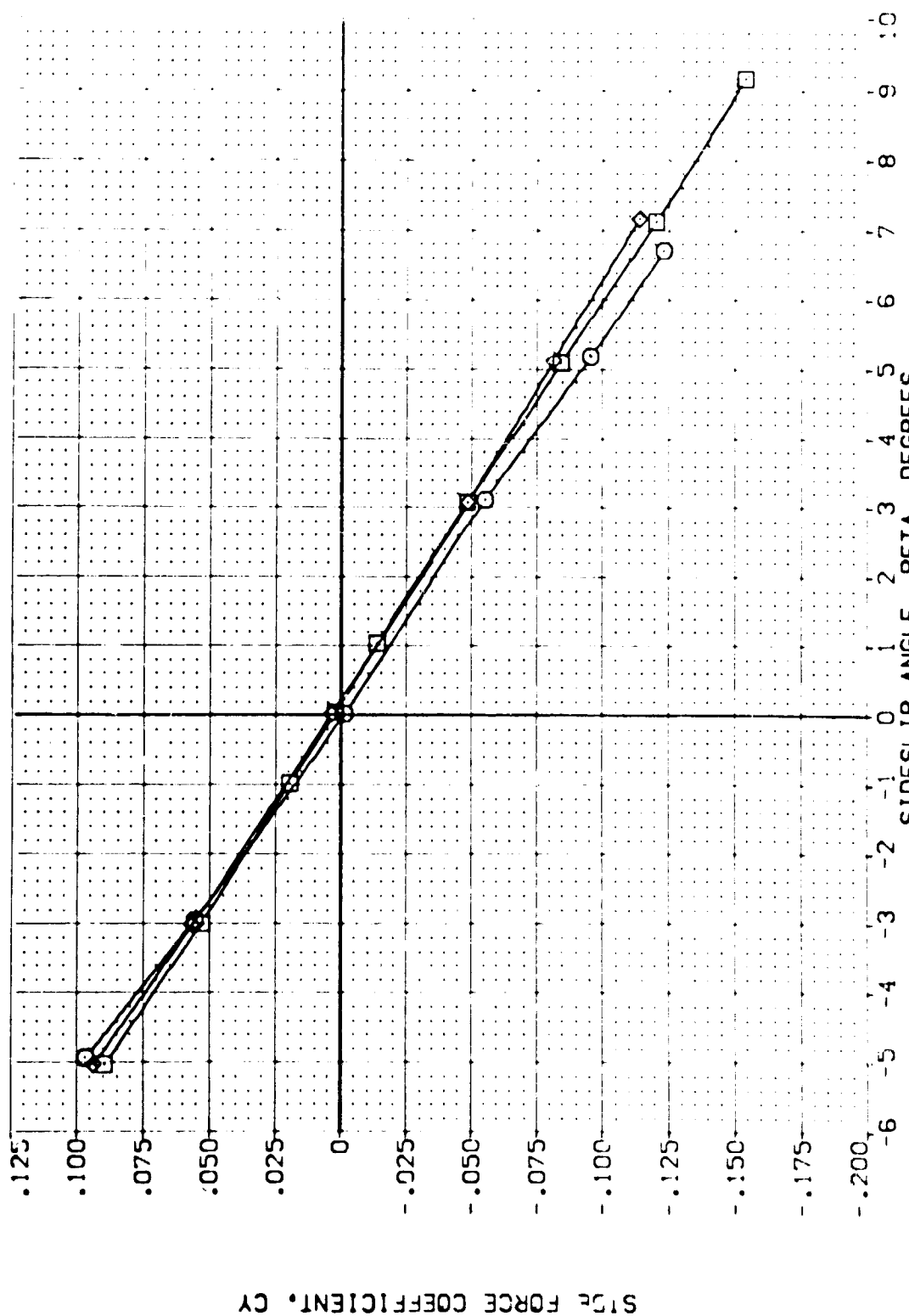


FIG. 12 LAT-DIR CHARACTERISTICS OF TOTAL VEHICLE-PART 2

(E)  $\mu_{AC} = 1.20$



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BOFLAP	SPDRK	AILRON	REFERENCE INFORMATION
(AEJ025)	ARC 11-747 DAS3A B C M F VI	.000	-11.700	55.000	.000	SREF 2.4210 SQ.FT.
(AEJ026)	ARC 11-747 DAS3A B C M F VI	10.000	-11.700	55.000	.000	LREF 14.2440 IN.
(AEJ027)	ARC 11-747 DAS3A B C M F VI	20.000	-11.700	55.000	.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .03%

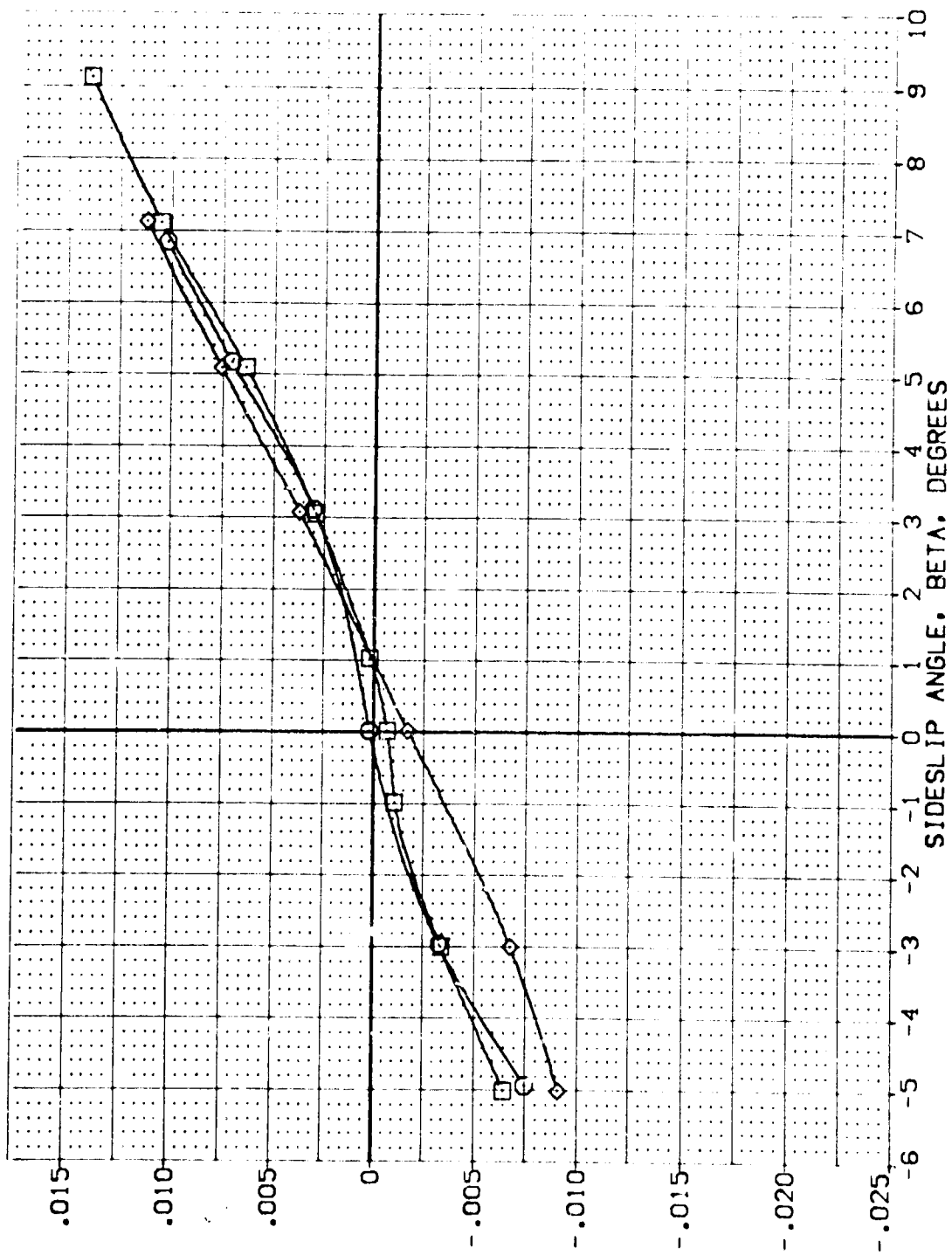
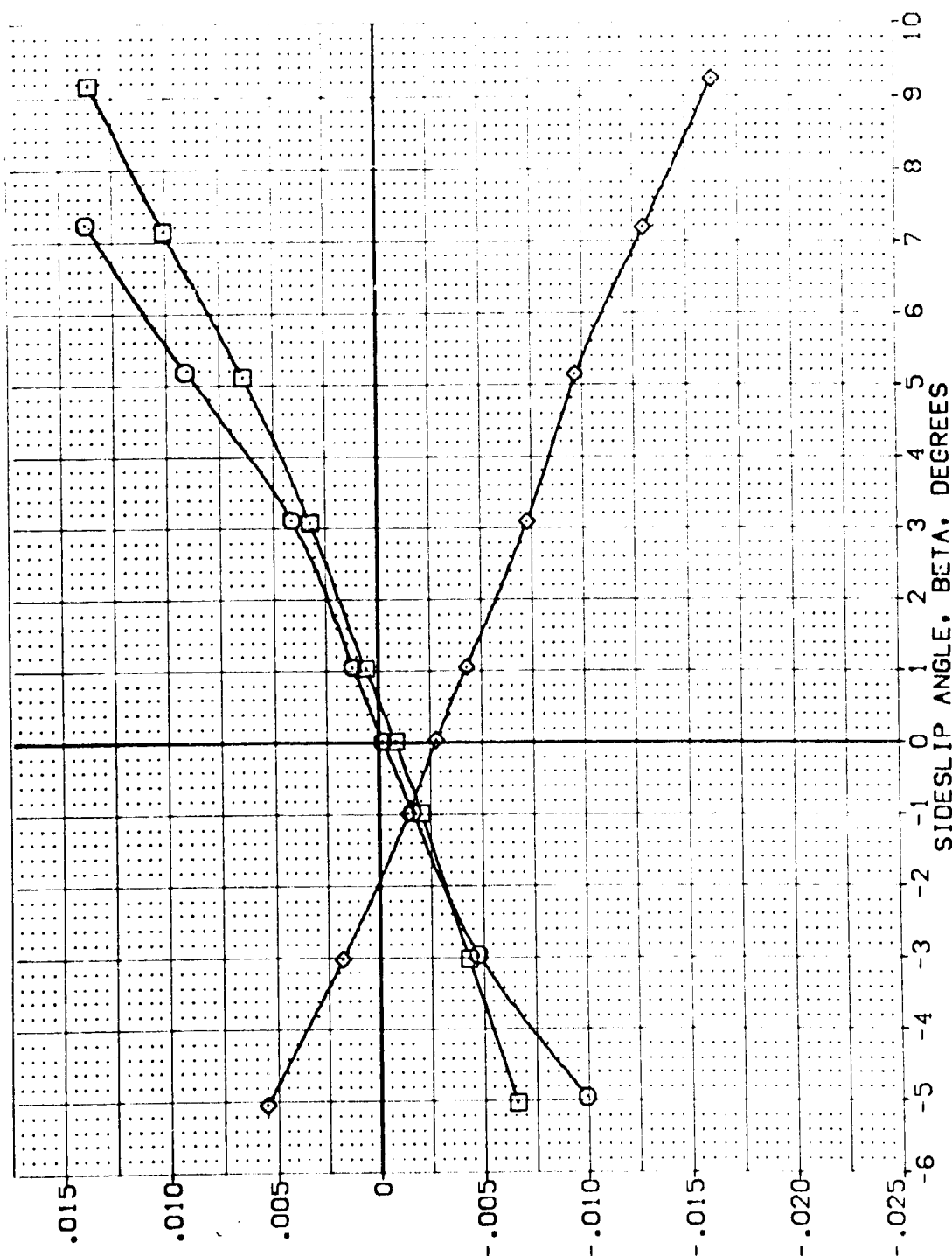


FIG. 12 LAT-DIR CHARACTERISTICS OF TOTAL VEHICLE-PART 2

(A)MACH = .60



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BOFLAP	SPOBRK	AIRLON	REFERENCE INFORMATION
(AEJ025)	ARC 11-747 BA53A B C M F V1 V	.000	-11.700	55.000	.000	SREF 2.4210 SQ.FT.
(AEJ026)	ARC 11-747 BA53A B C M F V1 V	10.000	-11.700	55.000	.000	LREF 14.2440 IN.
(AEJ027)	ARC 11-747 BA53A B C M F V1 V	20.000	-11.700	55.000	.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300



YAWING MOMENT COEFFICIENT, CYN (BODY AXIS)

FIG. 12 LAT-DIR CHARACTERISTICS OF TOTAL VEHICLE-PART 2

(B)MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BDFLAP	SPOBRK	AIRLON	REFERENCE INFORMATION
(AEJ025)	ARC 11-747 DA53A B C H F V1 V	.000	-11.700	55.000	.000	SREF 2.4210 SQ.FT.
(AEJ026)	ARC 11-747 DA53A B C H F V1 V	10.000	-11.700	55.000	.000	LREF 14.2440 IN.
(AEJ027)	ARC 11-747 DA53A B C H F V1 V	20.000	-11.700	55.000	.000	BREF 28.1004 IN.
						XMREF 32.9010 IN.
						YMREF .0000 IN.
						ZMREF 11.2500 IN.
						SCALE .0300 SCALE

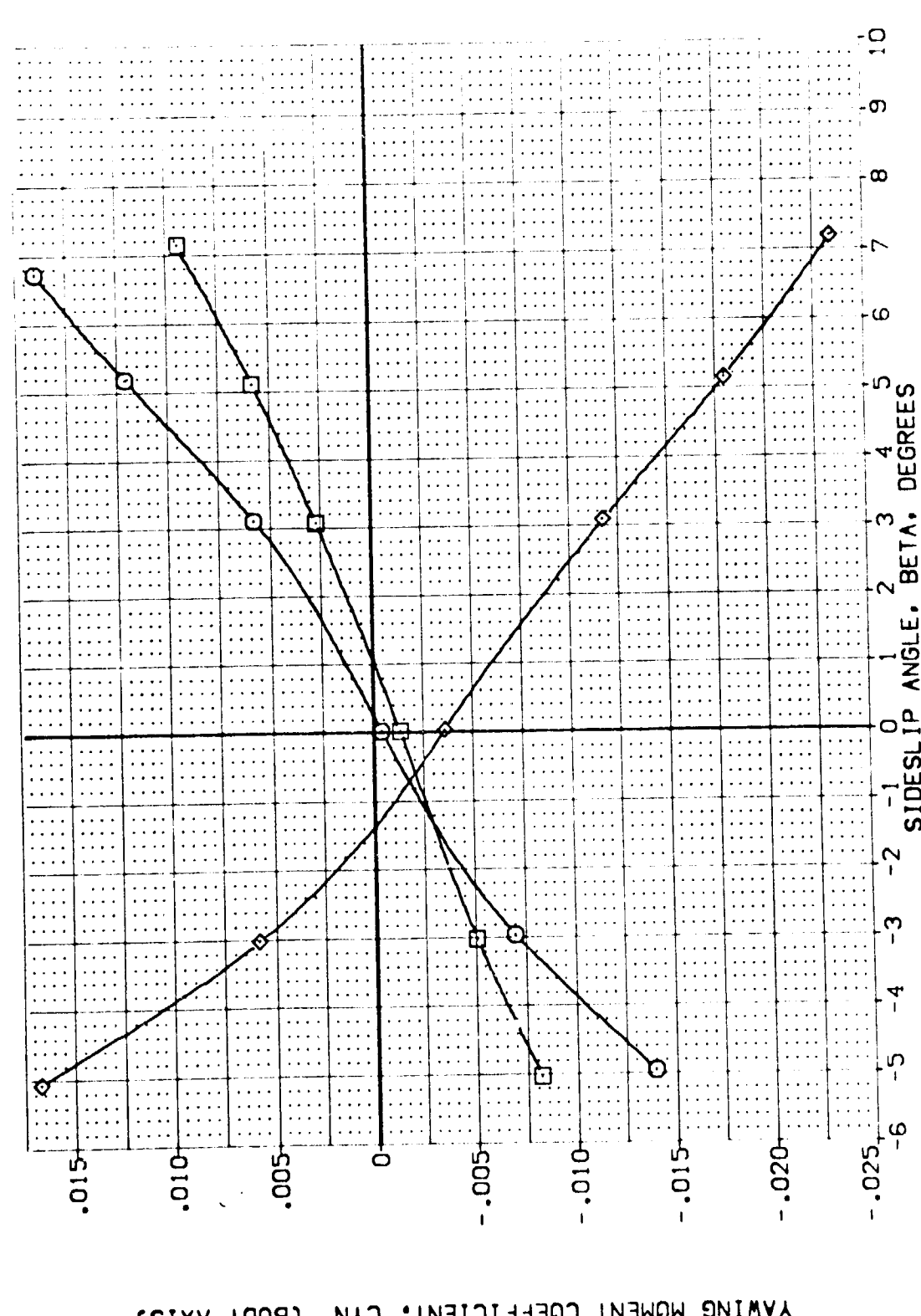


FIG. 12 LAT-OIR CHARACTERISTICS OF TOTAL VEHICLE-PART 2

(C)MACH = .90

# DATA SET SYMBOL

(AEJ025)  
(AEJ026)  
(AEJ027)

# CONFIGURATION DESCRIPTION

ARC 11-747 GAS3A B C H F VI V  
ARC 11-747 GAS3A B C H F VI V  
ARC 11-747 GAS3A B C H F VI V

# ALPHA

.000  
10.000  
20.000

# BOFLAP

-11.700  
-11.700  
-11.700

# SPOBRK

55.000  
55.000  
55.000

# AIRRON

.000  
.000  
.000

# REFERENCE INFORMATION

SREF 2.4210 50. FT.  
LREF 14.2440 IN.  
BREF 28.1004 IN.  
XMRP 32.3010 IN.  
YMRP .0000 IN.  
ZMRP 11.2500 IN.  
SCALE .0300

YAWING MOMENT COEFFICIENT, CYN (BODY AXIS)

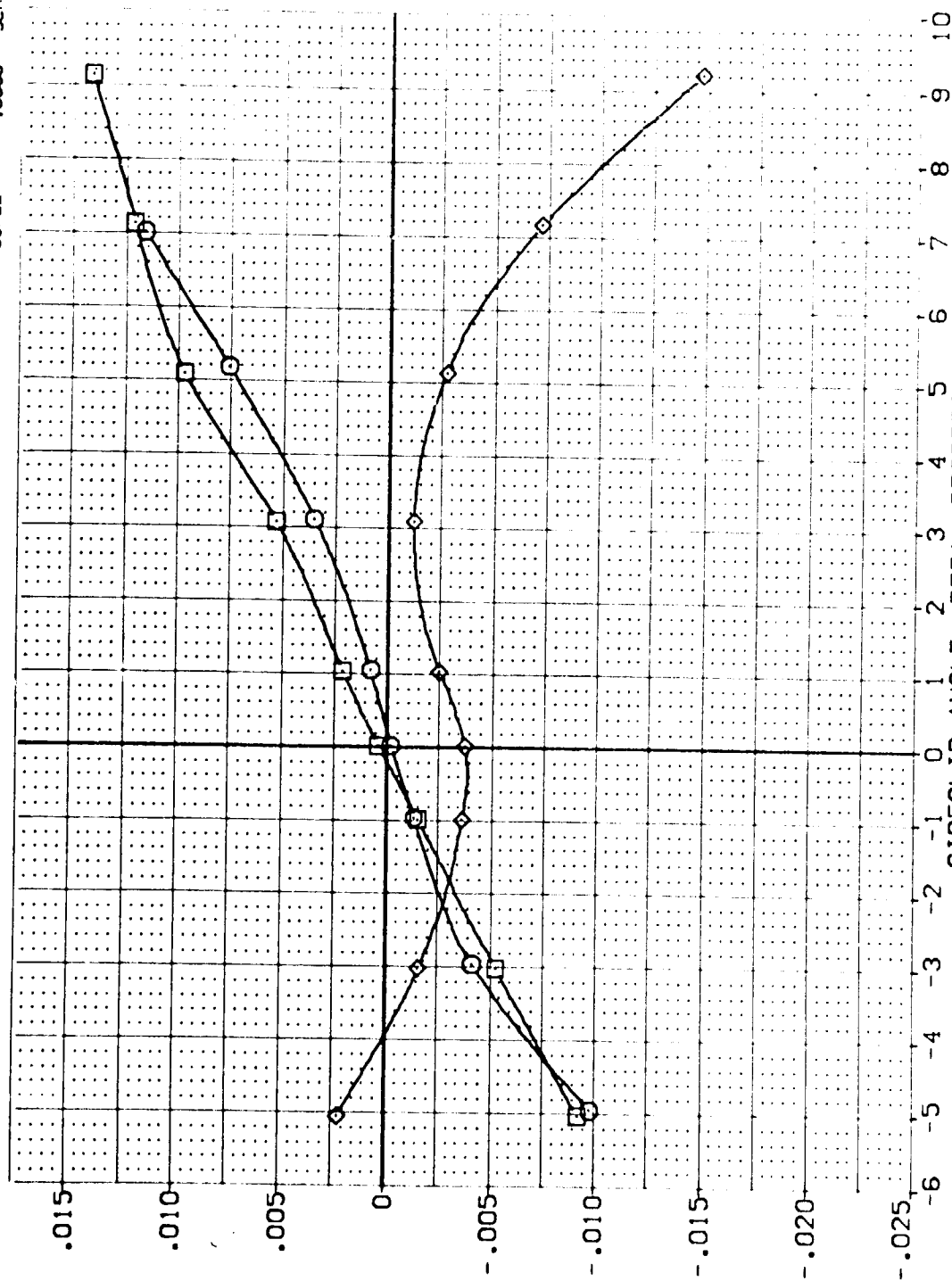
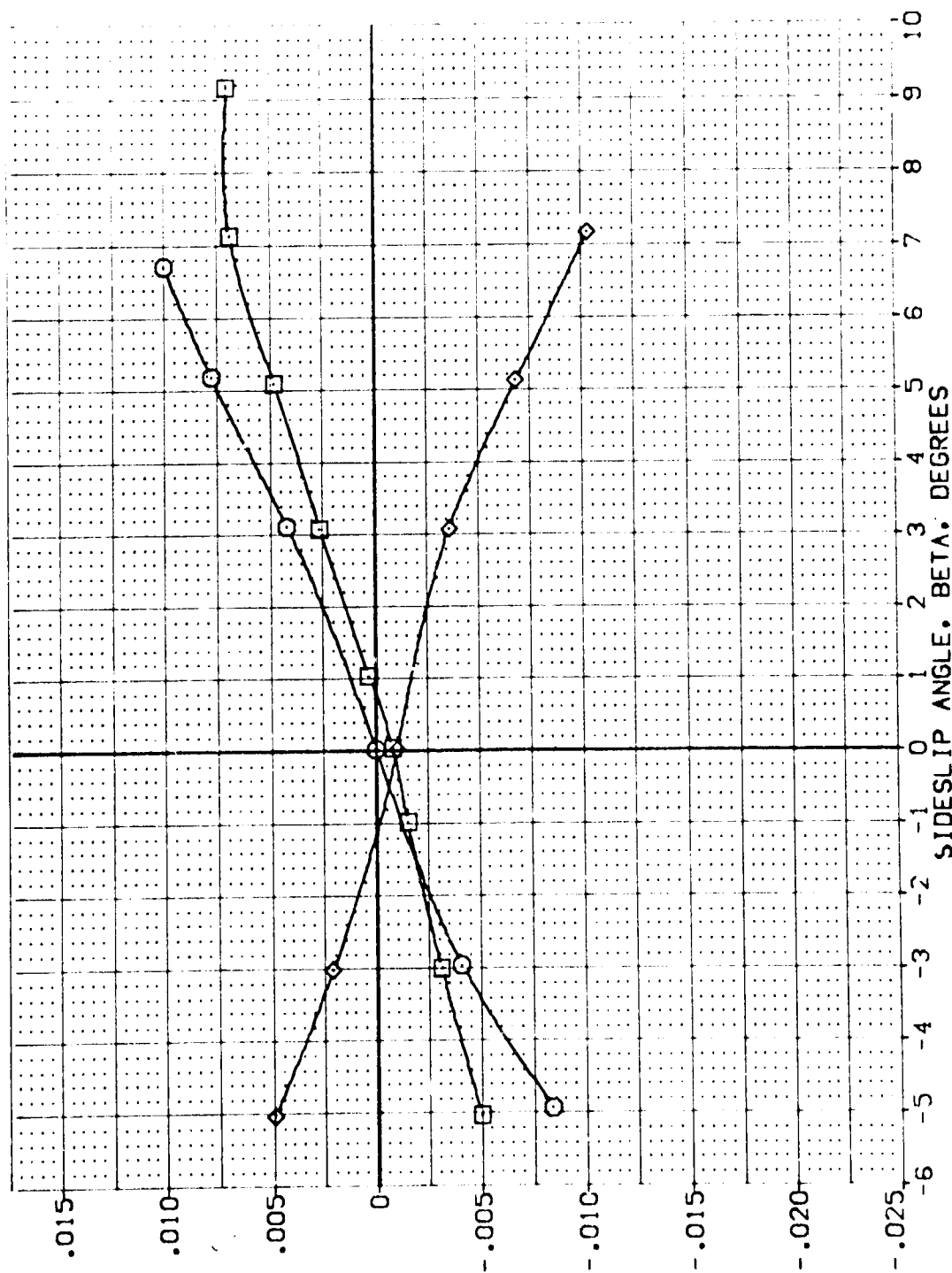


FIG. 12 LAT-DIR CHARACTERISTICS OF TOTAL VEHICLE-PART 2

COMACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BOFLAP	SPOBRK	AIRION	REFERENCE INFORMATION
(AEJ025)	ARC 11-747 BA53A B C M F V1 V	.000	-11.700	55.000	.000	SREF 2.4210 SQ.FT.
(AEJ026)	ARC 11-747 BA53A B C M F V1 V	10.000	-11.700	55.000	.000	LREF 14.2440 IN.
(AEJ027)	ARC 11-747 BA53A B C M F V1 V	20.000	-11.700	55.000	.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300



YAWING MOMENT COEFFICIENT, CYN (BODY AXIS)

FIG. 12 LAT-DIR CHARACTERISTICS OF TOTAL VEHICLE-PART 2

(C)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BOFLAP	SPOBRK	AILRON	REFERENCE INFORMATION
[AEJ025]	ARC 11-747 DA53A B C M F V1 V	.000	-11.700	55.000	.000	SREF 2.4210 SQ.FT.
[AEJ026]	ARC 11-747 DA53A B C M F V1 V	10.000	-11.700	55.000	.000	LREF 14.2440 IN.
[AEJ027]	ARC 11-747 DA53A B C M F V1 V	20.000	-11.700	55.000	.000	BREF 28.1004 IN.
						YMRP 32.3010 IN.
						ZMRP .0000 IN.
						SCALE 11.2500 IN.
						SCALE .0300

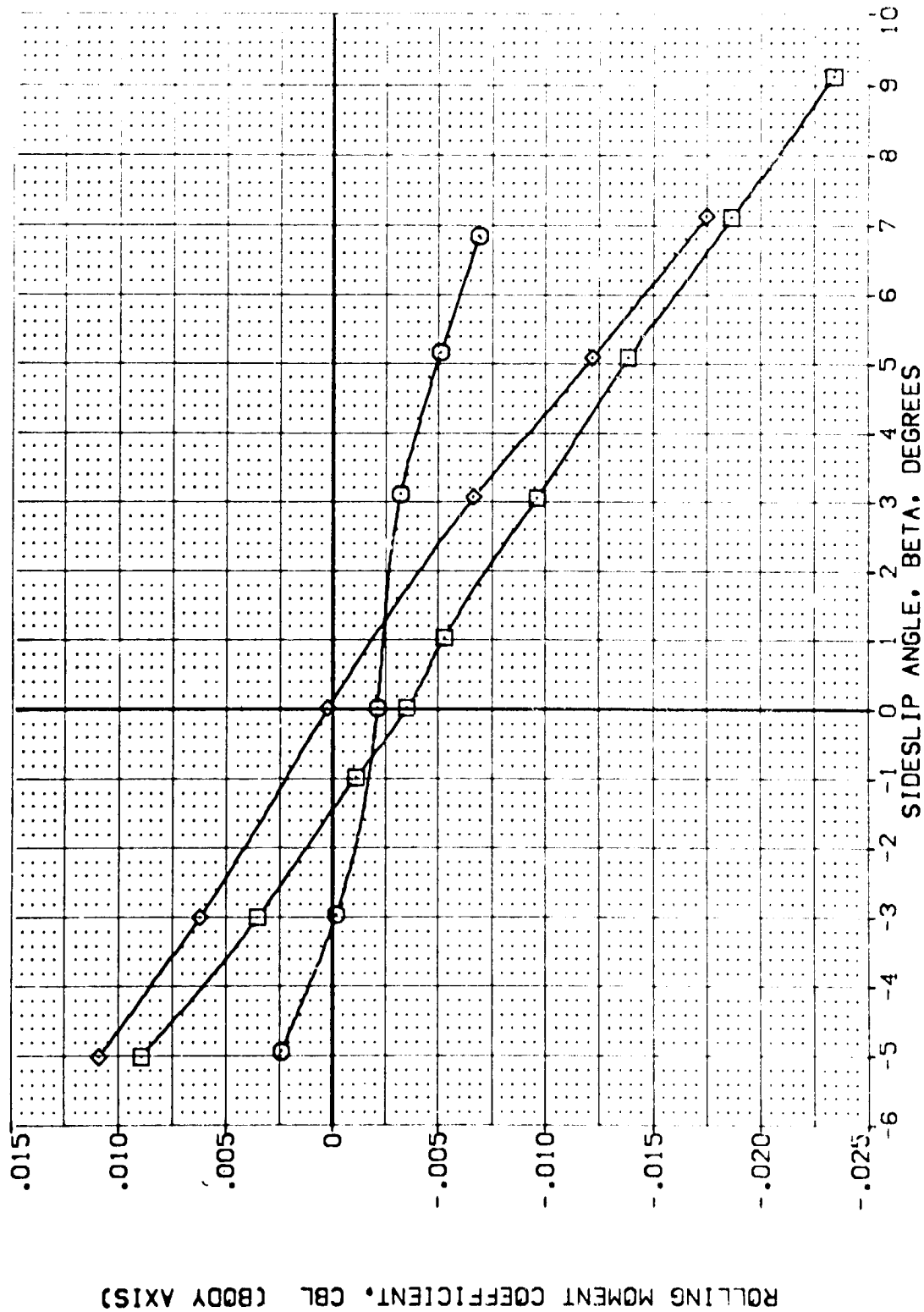
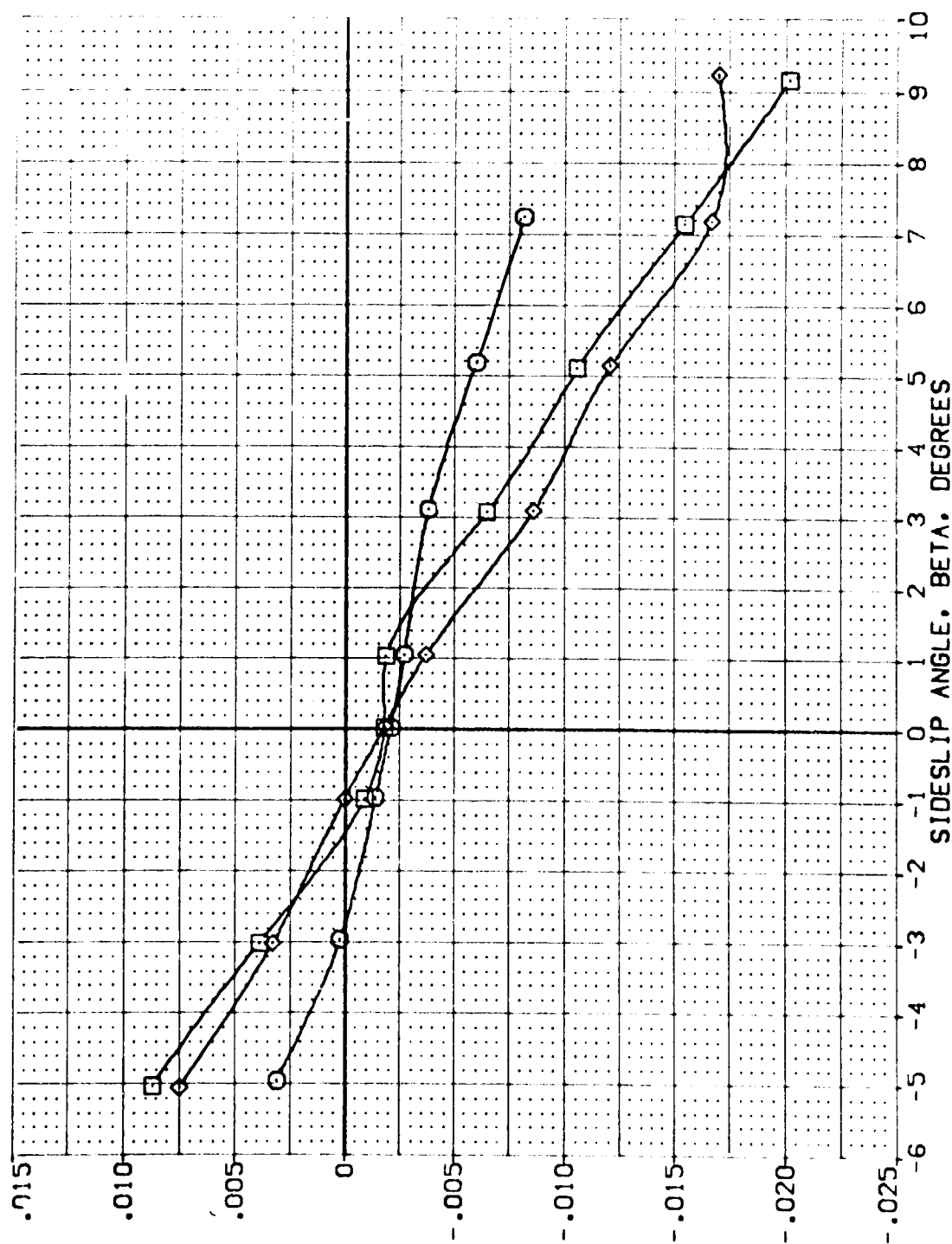


FIG. 12 LAT-DIR CHARACTERISTICS OF TOTAL VEHICLE-PART 2

(A)MACH = .60



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BOFLAP	SPODBK	AIRLON	REFERENCE INFORMATION
(AEJ025)	ARC 11-747 OA53A B C M F V1 V	.000	-11.700	55.000	.000	SREF 2.4210 SQ.FT.
(AEJ026)	ARC 11-747 OA53A B C M F V1 V	10.000	-11.700	55.000	.000	LREF 14.2440 IN.
(AEJ027)	ARC 11-747 OA53A B C M F V1 V	20.000	-11.700	55.000	.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300



ROLLING MOMENT COEFFICIENT, CBL (BODY AXIS)

FIG. 12 LAT-DIR CHARACTERISTICS OF TOTAL VEHICLE-PART 2

(B)MACH = .80



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BOFLAP	SPOBRK	AILRON	REFERENCE INFORMATION
(AEJ025)	ARC 11-747 0A53A B C M F V1 V	.000	-11.700	55.000	.000	SRF 2.4210 SQ.FT.
(AEJ026)	ARC 11-747 0A53A B C M F V1 V	10.000	-11.700	55.000	.000	LRF 14.2440 IN.
(AEJ027)	ARC 11-747 0A53A B C M F V1 V	20.000	-11.700	55.000	.000	BRF 28.1004 IN.
						YMRP 32.3010 IN.
						ZMRP .0000 IN.
						SCALE 11.2500 IN.

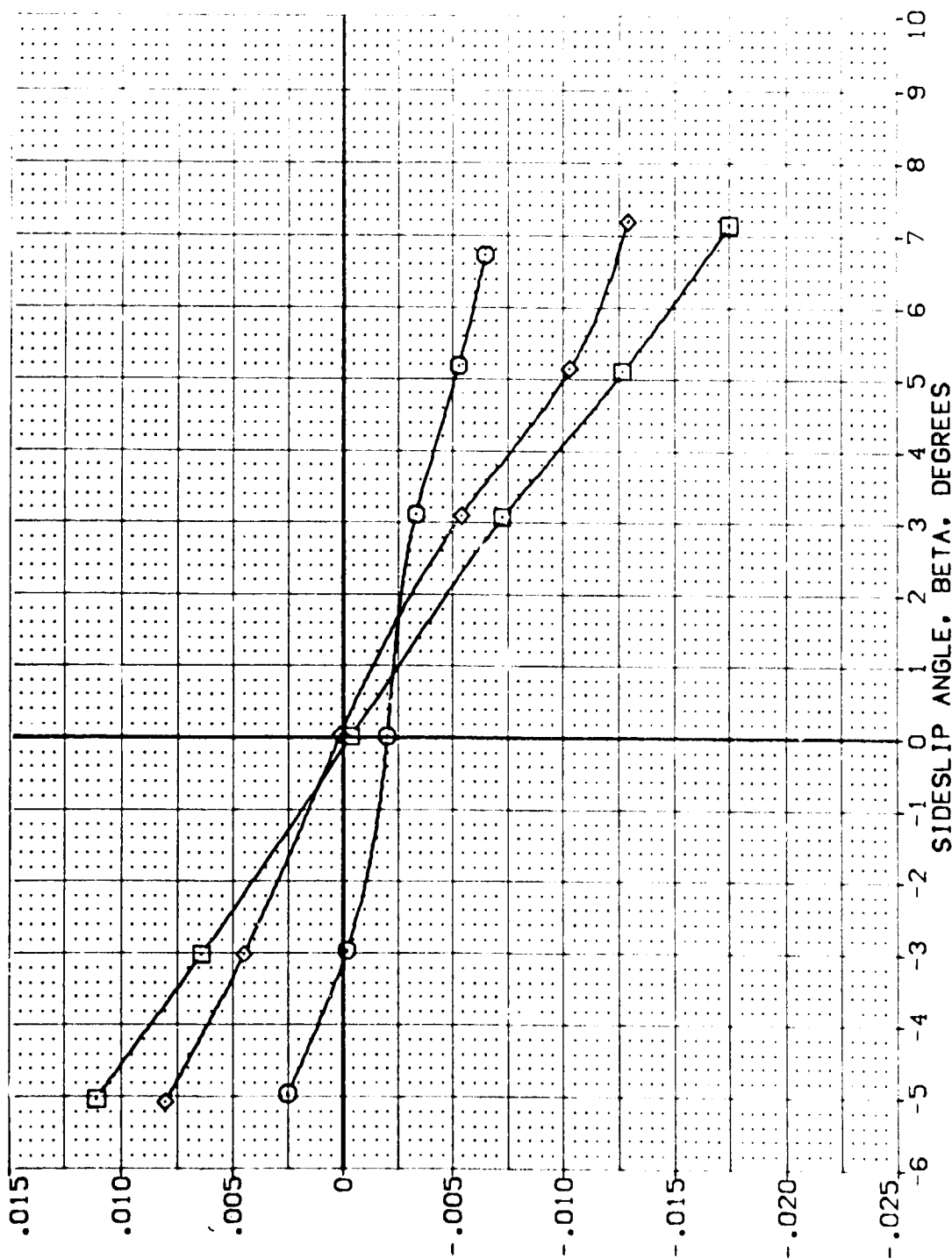
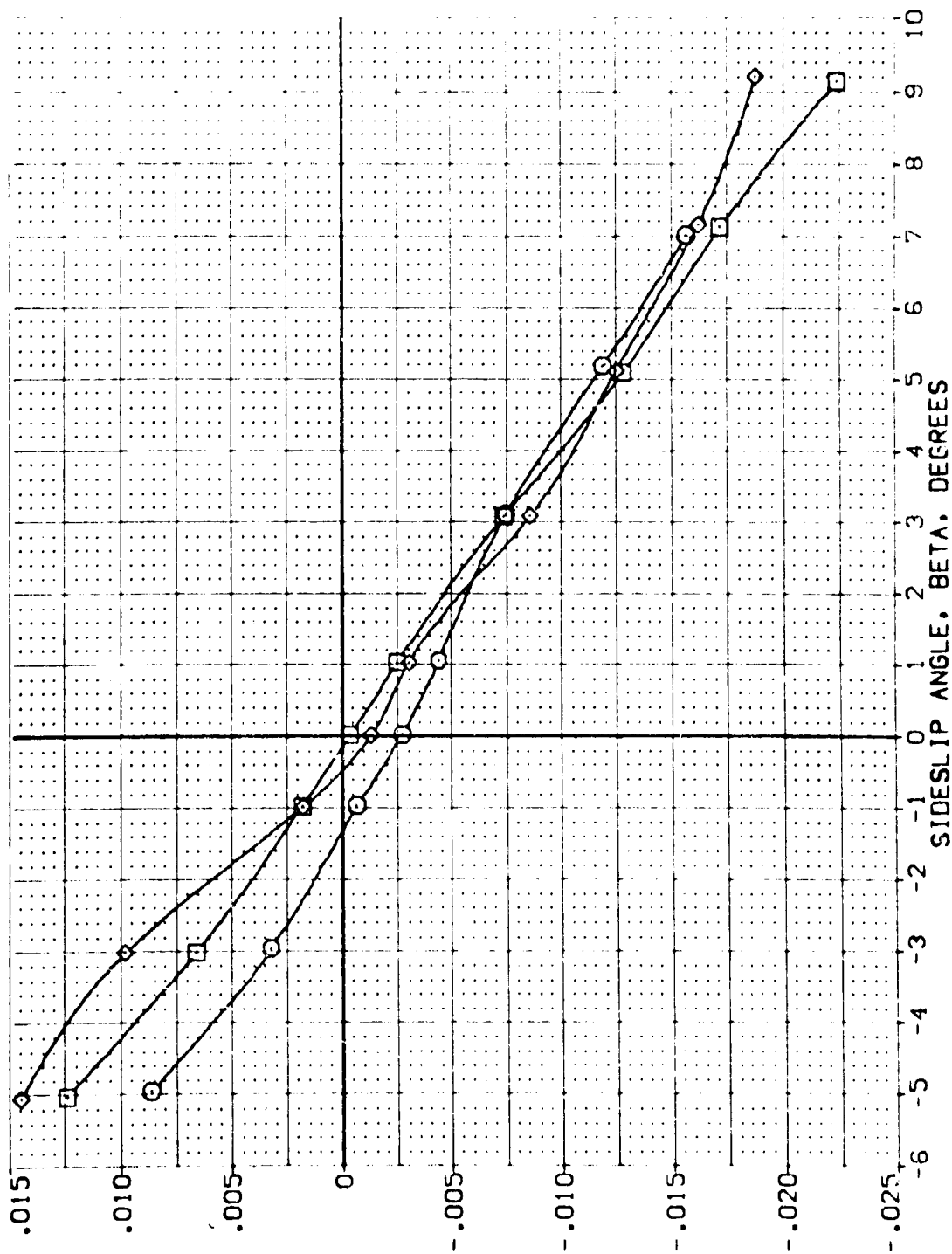


FIG. 12 LAT-DIR CHARACTERISTICS OF TOTAL VEHICLE-PART 2

(C)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BOFLAP	SPDRBK	AIRLON	REFERENCE INFORMATION
[AE1025]	ARC 11-747 DAS3A B C M F VI V	.000	-11.700	55.000	.000	SREF 2.4210 SQ.FT.
[AE1026]	ARC 11-747 DAS3A B C M F VI V	10.000	-11.700	55.000	.000	LREF 14.2440
[AE1027]	ARC 11-747 DAS3A B C M F VI V	20.000	-11.700	55.000	.000	BREF 28.1004
						XMRP 32.3010
						YMRP .0000
						ZMRP .0000
						SCALE 11.2500



ROLLING MOMENT COEFFICIENT, CBL (BODY AXIS)

FIG. 12 LAT-DIR CHARACTERISTICS OF TOTAL VEHICLE-PART 2

(D)MACH = 1.05

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(AEJ025) ARC 11-747 DA53A B C M F VI V

(AEJ026) ARC 11-747 DA53A B C M F VI V

(AEJ027) ARC 11-747 DA53A B C M F VI V

NOM: RVLL

NOM: RVLL

NOM: RVLL

ALPHA

0.000

10.000

20.000

BDFLAP

-11.700

-11.700

-11.700

SPDRBK

55.000

55.000

55.000

AIRLON

.000

.000

.000

REFERENCE INFORMATION

SPREF 2.4210 50.FT.

LRREF 14.2440 IN.

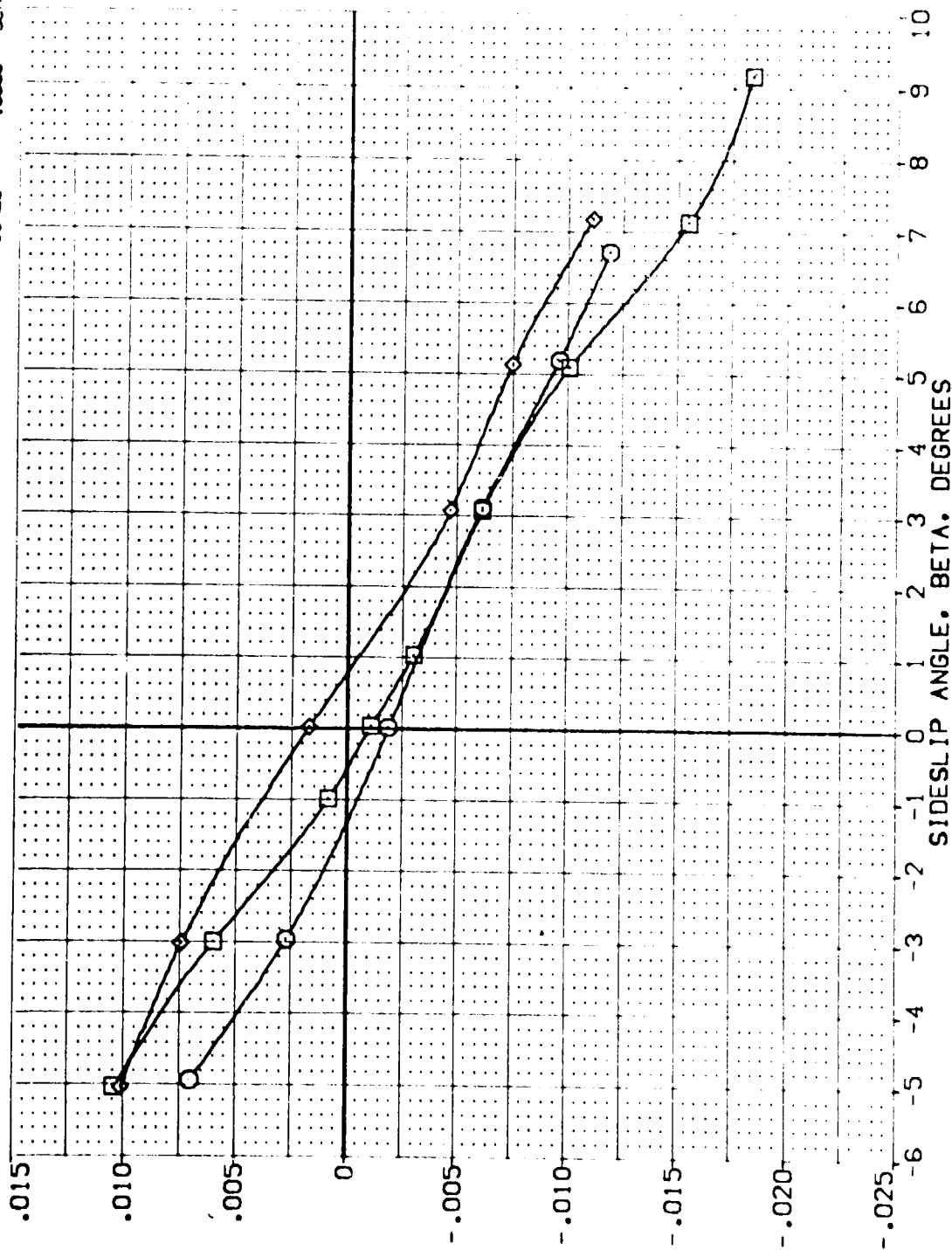
BRREF 28.1004 IN.

XMRP 32.3010 IN.

YMRP .0000 IN.

ZMRP 11.2500 IN.

SCALE .0300



ROLLING MOMENT COEFFICIENT, CBL (BODY AXIS)

FIG. 12 LAT-DIR CHARACTERISTICS OF TOTAL VEHICLE-PART 2

(E)MACH = 1.20



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BOFLAP	SPOBRK	AILRON	REFERENCE INFORMATION
[AEJ008]	ARC 11-747 0A53A B C M F V1 V	.000	-11.700	85.000	.000	SREF 2.4210 SQ.FT.
[AEJ040]	ARC 11-747 0A53A B C M F V1 V	10.000	-11.700	85.000	.000	LREF 14.2440 IN.
[AEJ041]	ARC 11-747 0A53A B C M F V1 V	20.000	-11.700	85.000	.000	BREF 28.1004 IN.
						YMRP 32.3010 IN.
						ZMRP .0000 IN.
						SCALE 11.2500 IN.
						SCALE .0300

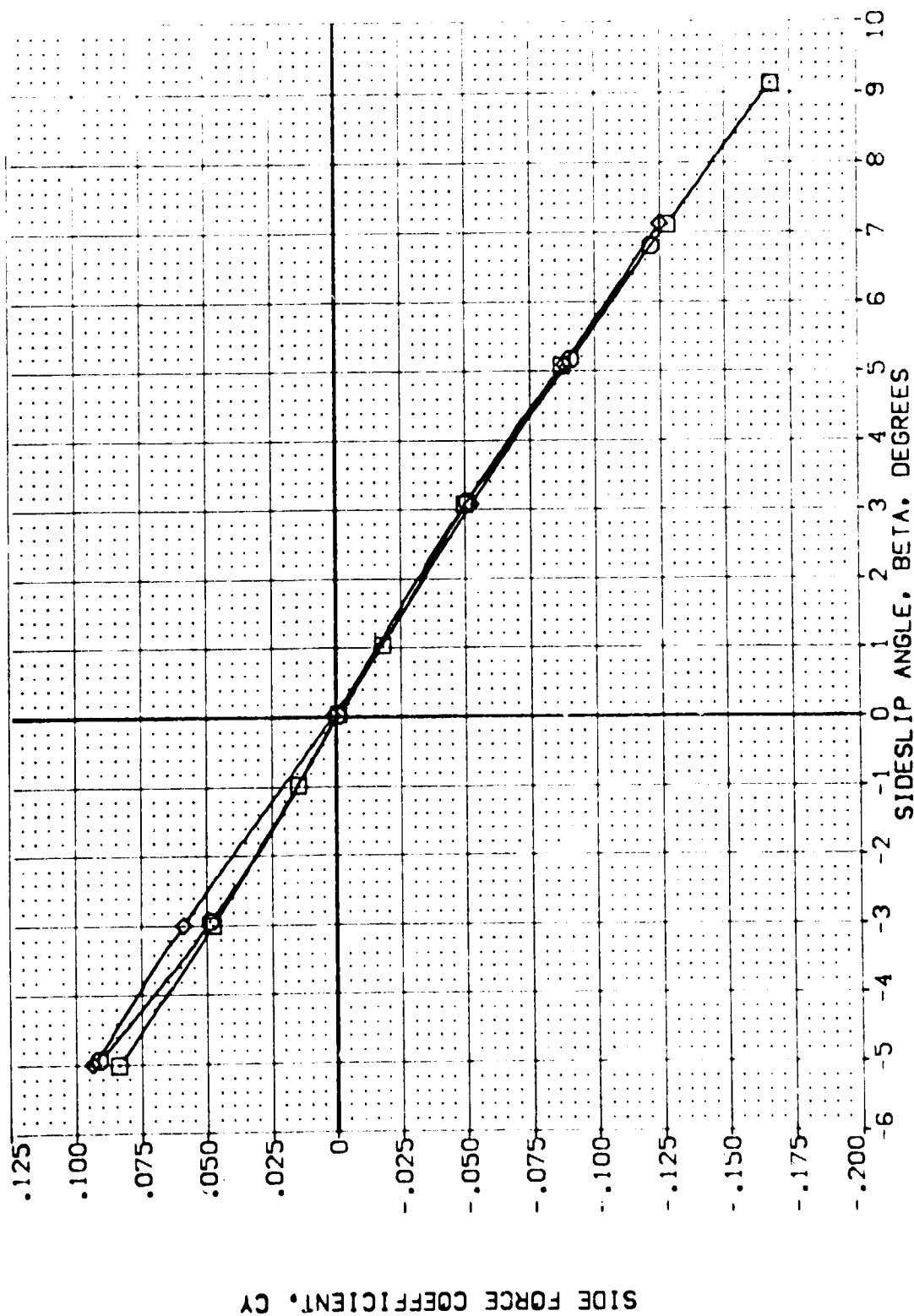


FIG. 13 LAT-DIR CHARACTERISTICS OF TOTAL VEHICLE-PART 3

(A)MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BOFLAP	SPOBRK	AIRLON	REFERENCE INFORMATION
(AEJ038)	ARC 11-747 OAS3A B C M F VI V	.000	-11.700	65.000	.000	SREF 2.4210 SQ.FT.
(AEJ040)	ARC 11-747 OAS3A B C M F VI V	10.000	-11.700	85.000	.000	LREF 14.2440 IN.
(AEJ041)	ARC 11-747 OAS3A B C M F VI V	20.000	-11.700	85.000	.000	FREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

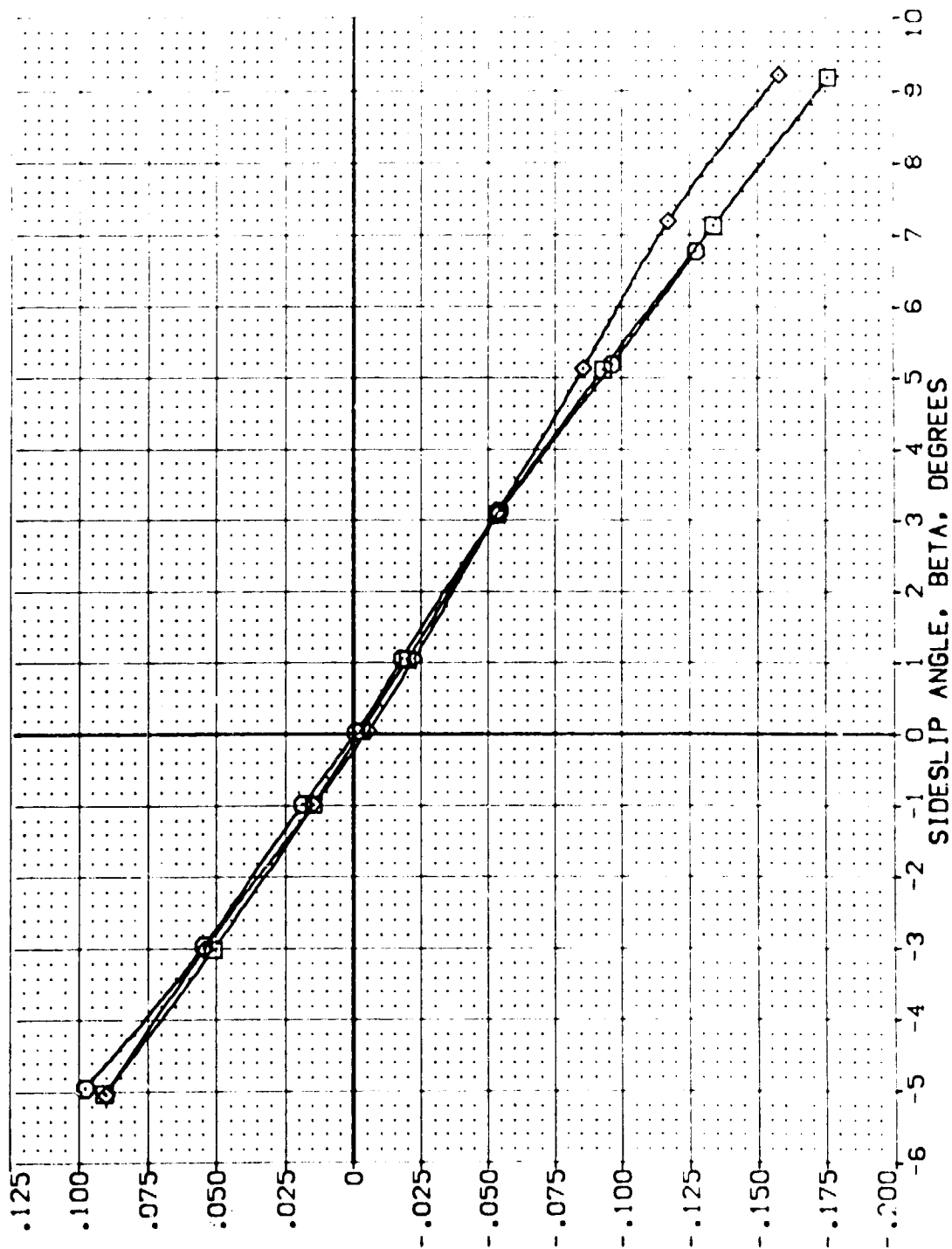


FIG. 13 LAT-DIR CHARACTERISTICS OF TOTAL VEHICLE-PART 3

(B)MACH = .80



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BOFLAP	SPOBRK	AIRLON	REFERENCE INFORMATION
[AEJ039]	ARC 11-747 0A53A B C H F V1 V	.000	-11.700	85.000	.000	SREF 2.4210 SQ.FT.
[AEJ040]	ARC 11-747 0A53A B C H F V1 V	10.000	-11.700	85.000	.000	LREF 14.2440 IN.
[AEJ041]	ARC 11-747 0A53A B C H F V1 V	20.000	-11.700	85.000	.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

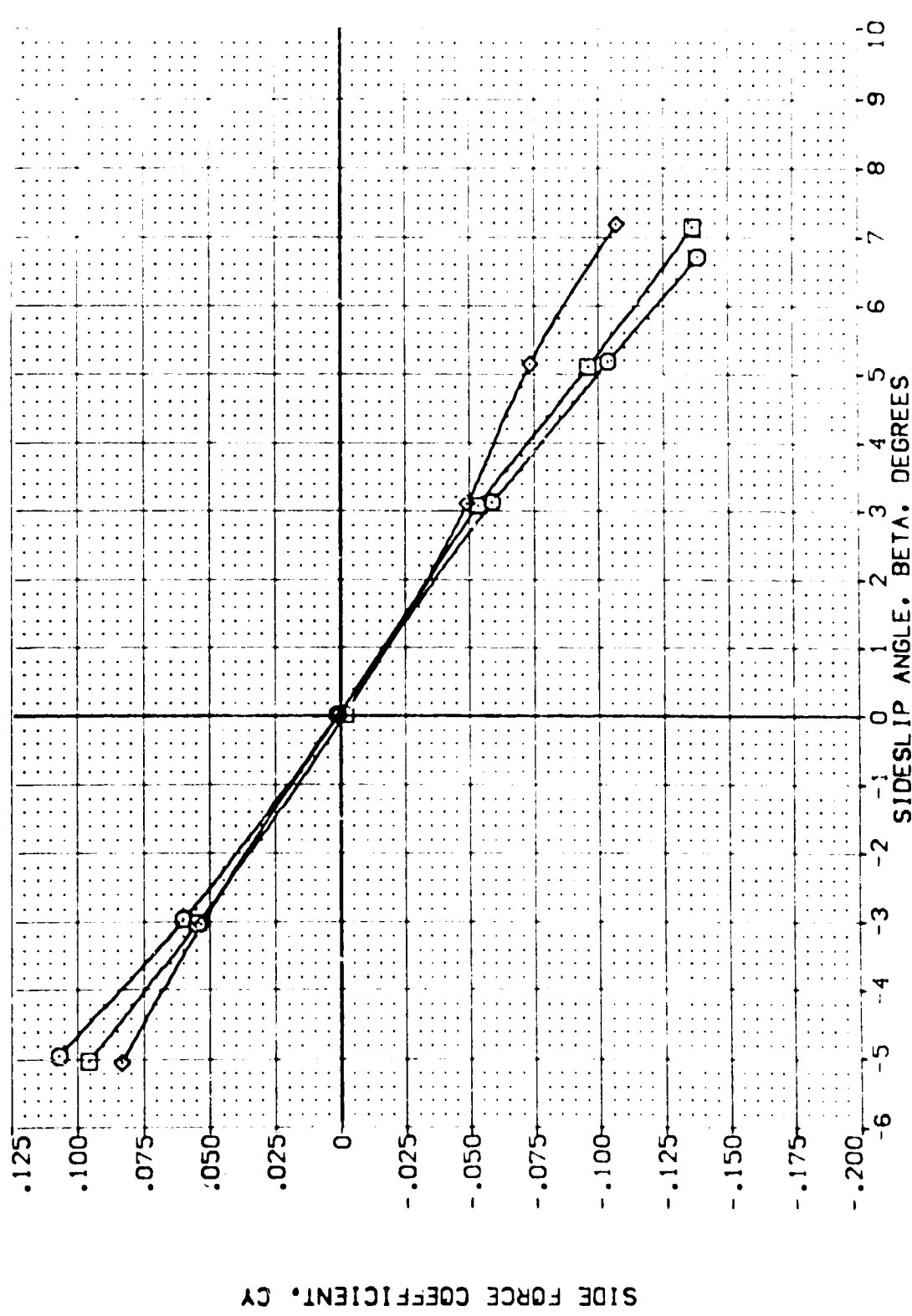


FIG. 13 LAT-DIR CHARACTERISTICS OF TOTAL VEHICLE-PART 3

(C)MACH = .90

DATA SET SYMBOL    CONFIGURATION DESCRIPTION    ALPHA    BOCLAP    SPOBRK    AIRRON    REFERENCE INFORMATION

[AEJ009]	ARC 11-747 BAS3A B C H F VI V	10.000	-11.700	85.000	.000	SREF	2.4210	20. FT.
[AEJ040]	ARC 11-747 BAS3A B C H F VI V	20.000	-11.700	85.000	.000	LREF	14.2440	N.
[AEJ041]	ARC 11-747 BAS3A B C H F VI V				.000	BREF	28.1004	N.
						YMRP	32.3010	N.
						ZMRP	11.2500	N.
						SCALE	.0300	SCALE

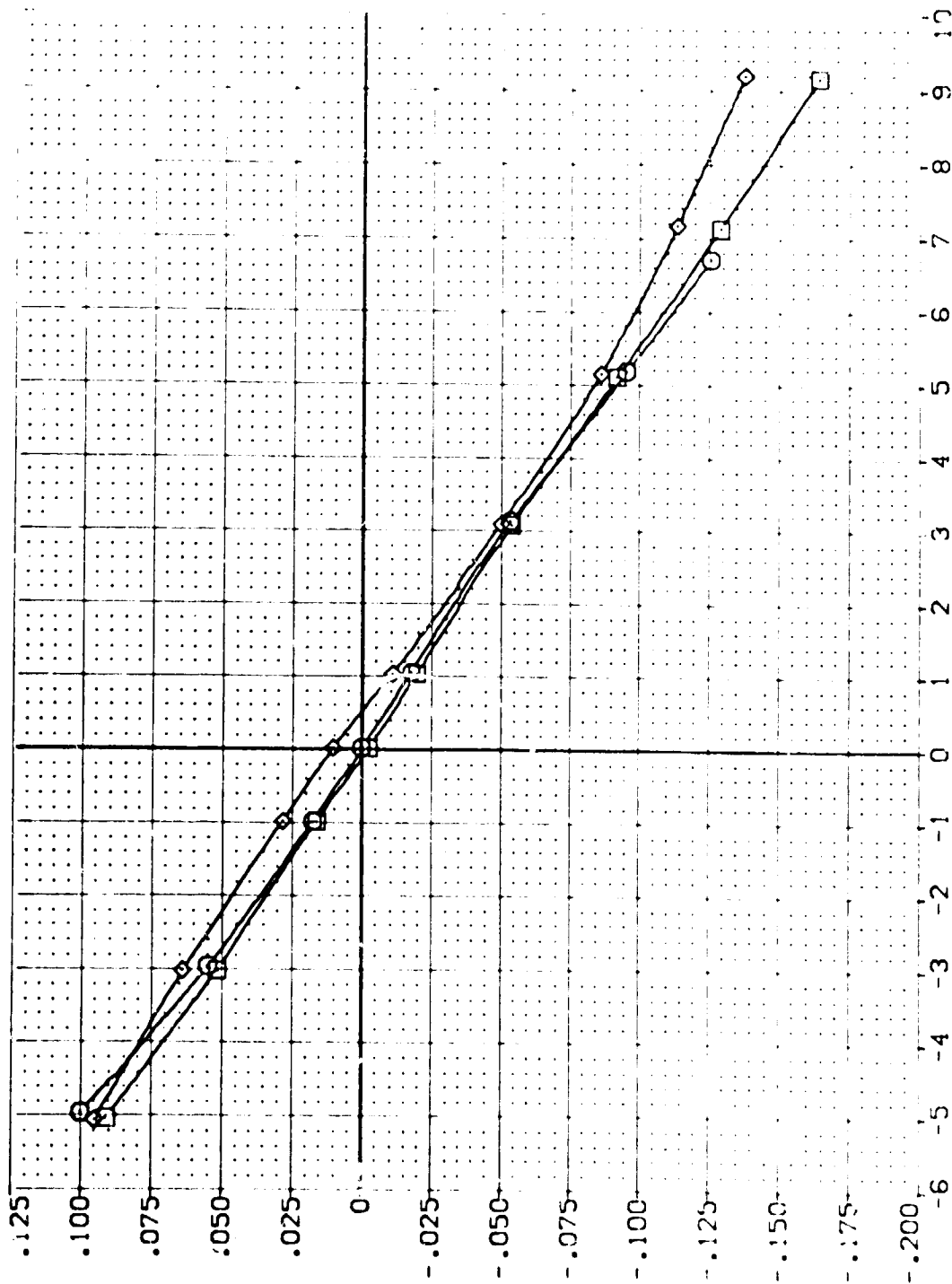


FIG. 13 LAT-DIR CHARACTERISTICS OF TOTAL VEHICLE-PART 3

(C)MACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NON- RV/L	ALPHA	BD FLAP	SPDR X	AIR RON	REFERENCE INFORMATION
[AEJ009]	ARC 11-747 QAS3A B C M F V	NON- RV/L	.000	-11.700	85.000	.000	SREF 2.4210 SQ.FT.
[AEJ010]	ARC 11-747 QAS3A B C M F V	NON- RV/L	10.000	-11.700	85.000	.000	LREF 14.240 IN.
[AEJ011]	ARC 11-747 QAS3A B C M F V	NON- RV/L	20.000	-11.700	85.000	.000	BREF 28.1004 IN.
							XMRP 32.3010 IN.
							YMRP .0000 IN.
							ZMRP 11.2500 IN.
							SCALE .0300

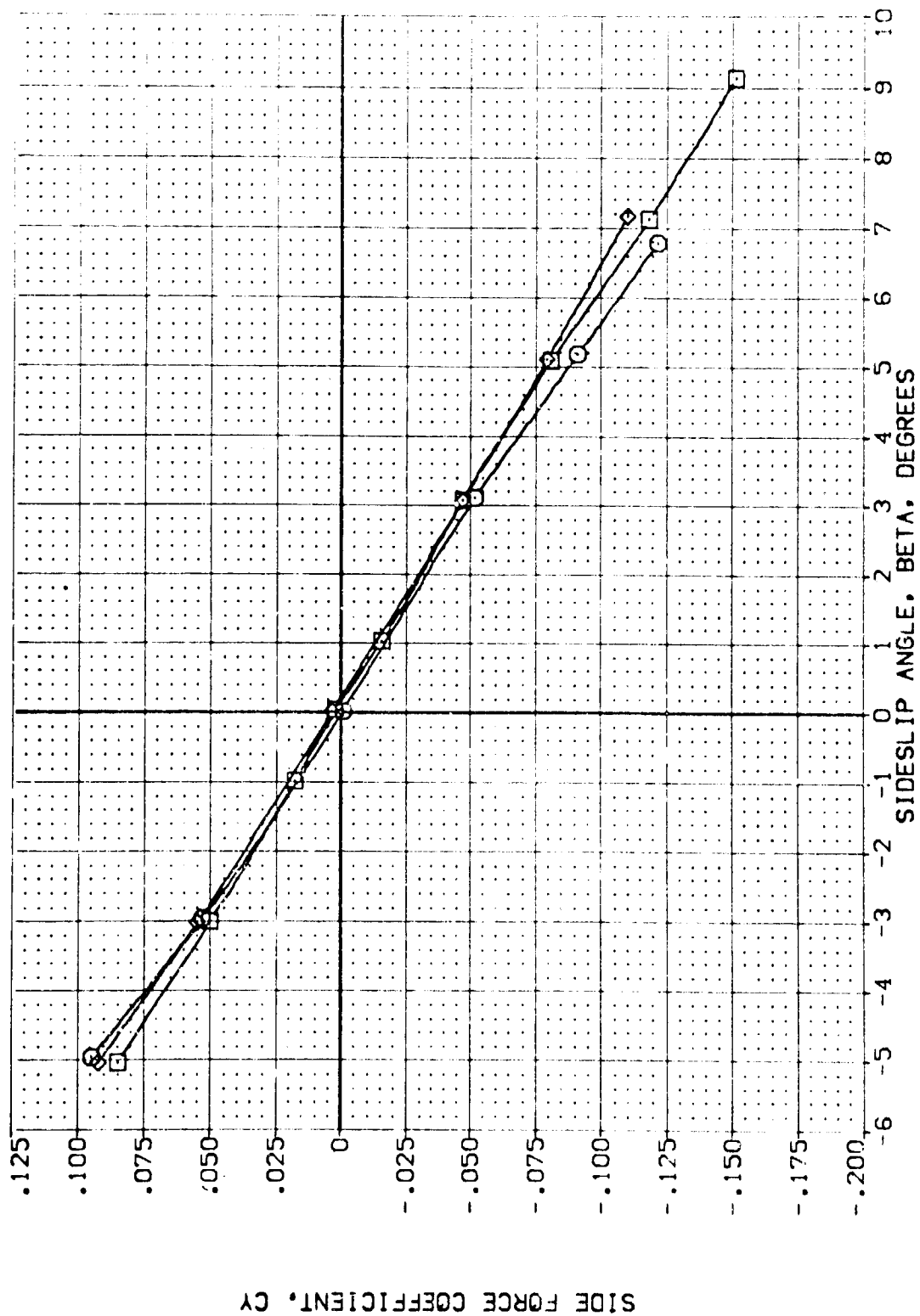


FIG. 13 LAT-DIR CHARACTERISTICS OF TOTAL VEHICLE-PART 3

(E)MACH = 1.20



DATA SET SYMBOL    CONFIGURATION DESCRIPTION    ALPHA    BOFLAP    SPOBRK    AIRLON    REFERENCE INFORMATION

ARC 11-747 DAS3A B C M F VI V	0.000	-11.700	85.000	.000	SREF	2.4210	SQ.FT.
ARC 11-747 DAS3A B C M F VI V	10.000	-11.700	85.000	.000	L'REF	14.2440	IN.
ARC 11-747 DAS3A B C M F VI V	20.000	-11.700	85.000	.000	B'REF	28.1004	IN.
					YMRP	32.3010	IN.
					ZMRP	11.2500	IN.
					SCALE	.0300	SCALE

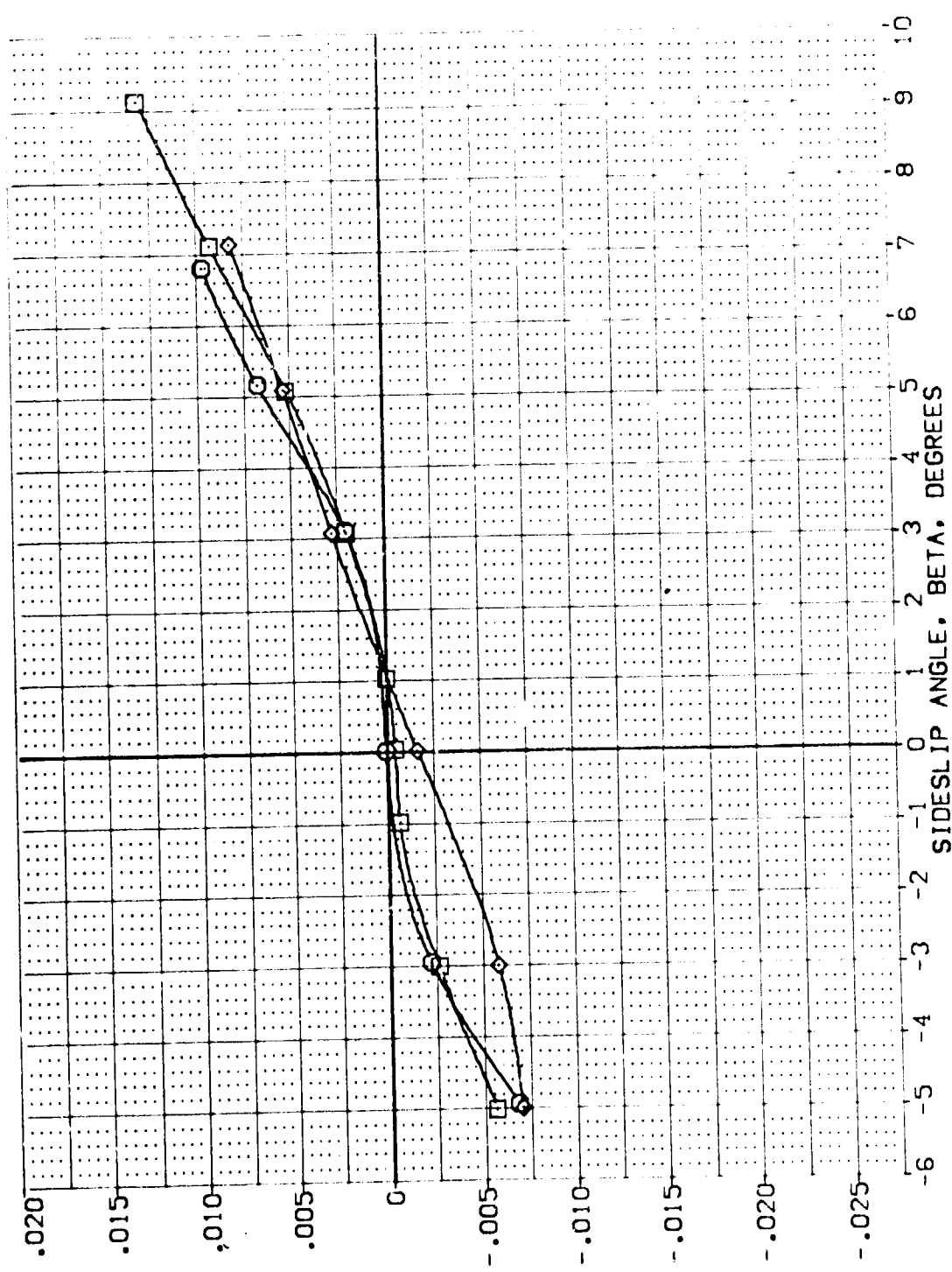


FIG. 13 LAT-DIR CHARACTERISTICS OF TOTAL VEHICLE-PART 3

(A)MACH = .60



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BOFLAP	SPOBRK	AILRON	REFERENCE INFORMATION
ARC 11-747 BA53A B C M F VI	NON: RV/L	.000	-11.700	85.000	.000	SREF 2.4210 SQ. FT.
ARC 11-747 BA53A B C M F VI	NON: RV/L	10.000	-11.700	85.000	.000	LREF 14.2440 IN.
ARC 11-747 BA53A B C M F VI	NON: RV/L	20.000	-11.700	85.000	.000	BREF 28.1000 IN.
						YMRP 32.3010 IN.
						ZMRP .0000 IN.
						SCALE 11.2500 IN.
						SCALE .0300

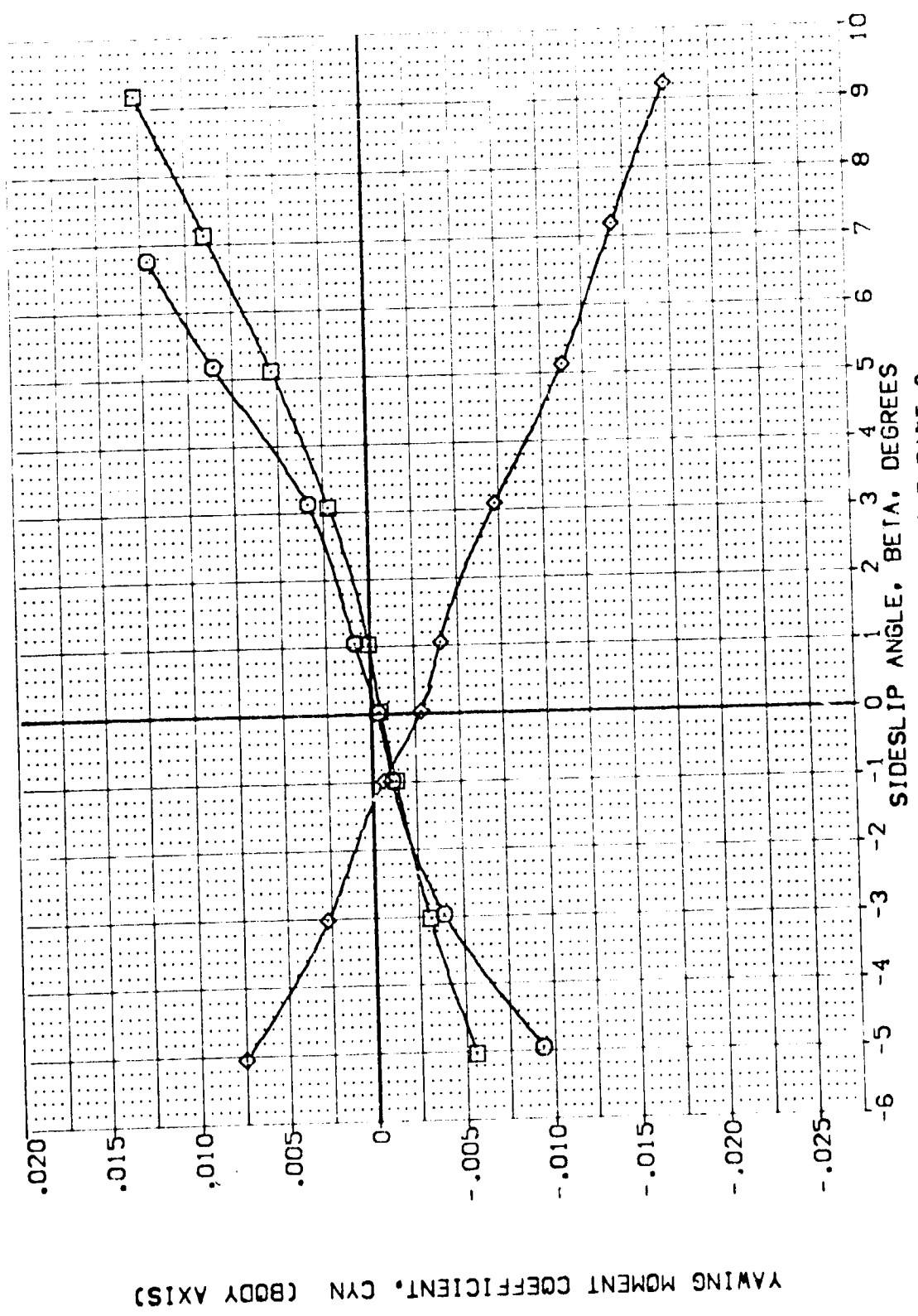


FIG. 13 LAT-DIR CHARACTERISTICS OF TOTAL VEHICLE-PART 3

(8)MACH = .80



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NON: RV/L	ALPHA	BD/LAP	SPOBRK	AILRON	REFERENCE INFORMATION
{AEJ039}	ARC 11-747 BA53A B C H F VI V	NON: RV/L	.000	-11.700	85.000	.000	SREF 2.4210 SQ.FT.
{AEJ040}	ARC 11-747 BA53A B C H F VI V	NON: RV/L	10.000	-11.700	85.000	.000	LREF 14.2440 IN.
{AEJ041}	ARC 11-747 BA53A B C H F VI V	NON: RV/L	20.000	-11.700	85.000	.000	BREF 28.1004 IN.
							XMRP 32.3010 IN.
							YMRP .0000 IN.
							ZMRP 11.2500 IN.
							SCALE .0300

YAWING MOMENT COEFFICIENT, CYN (BODY AXIS)

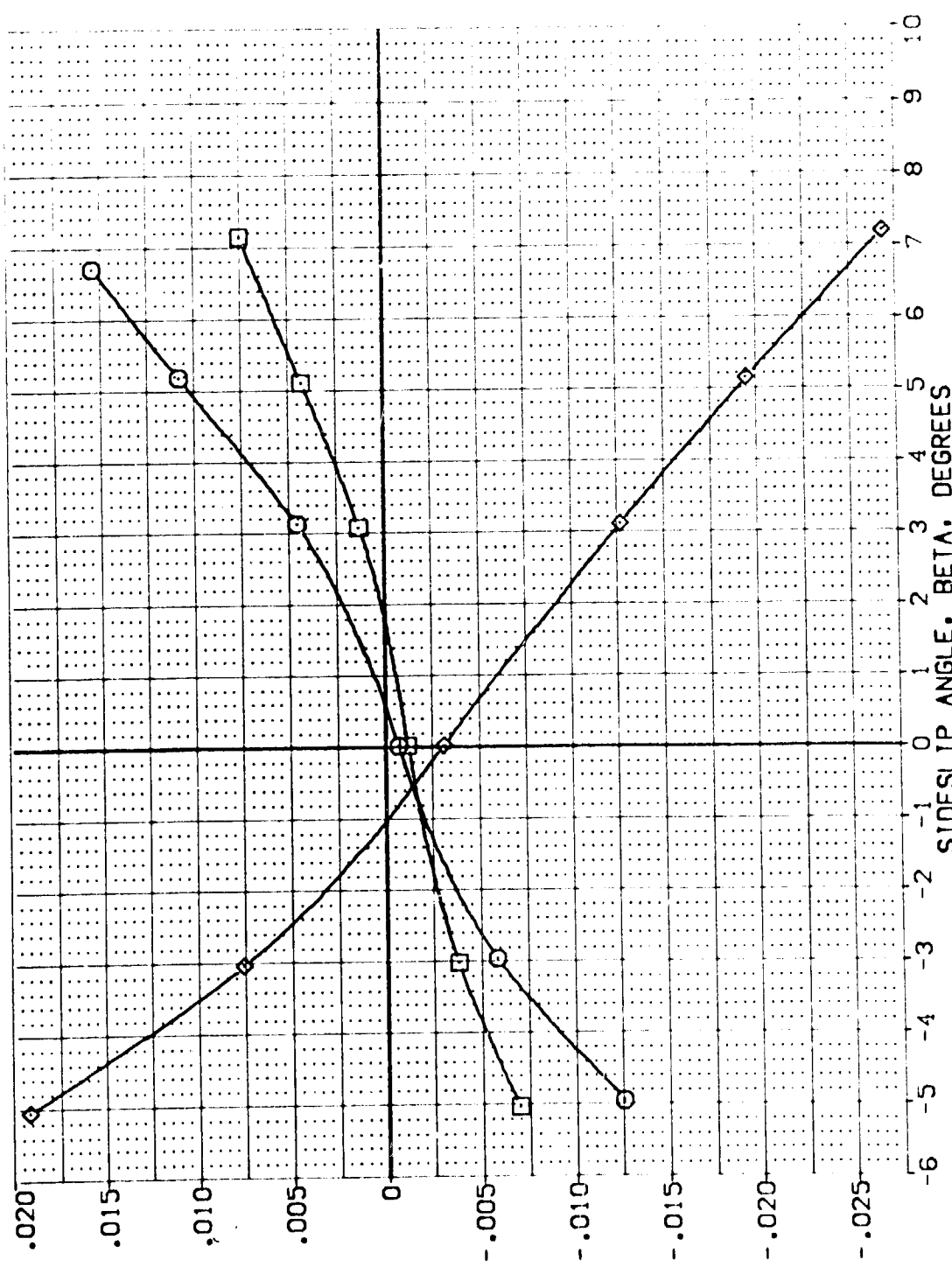


FIG. 13 LAT-DIR CHARACTERISTICS OF TOTAL VEHICLE-PART 3

(C)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BOFLAP	SPOBRK	AIRLON	REFERENCE INFORMATION
[AEJ038]	ARC 11-747 DA53A B C H F VI V	.000	-11.700	85.000	.000	SREF 2.4210 SQ.FT.
[AEJ040]	ARC 11-747 DA53A B C H F VI V	10.000	-11.700	85.000	.000	LREF 14.2440 IN.
[AEJ041]	ARC 11-747 DA53A B C H F VI V	20.000	-11.700	85.000	.000	BREF 28.1001 IN.
						YMRP 32.3010 IN.
						ZMRP .0000 IN.
						SCALE 11.2500 IN.

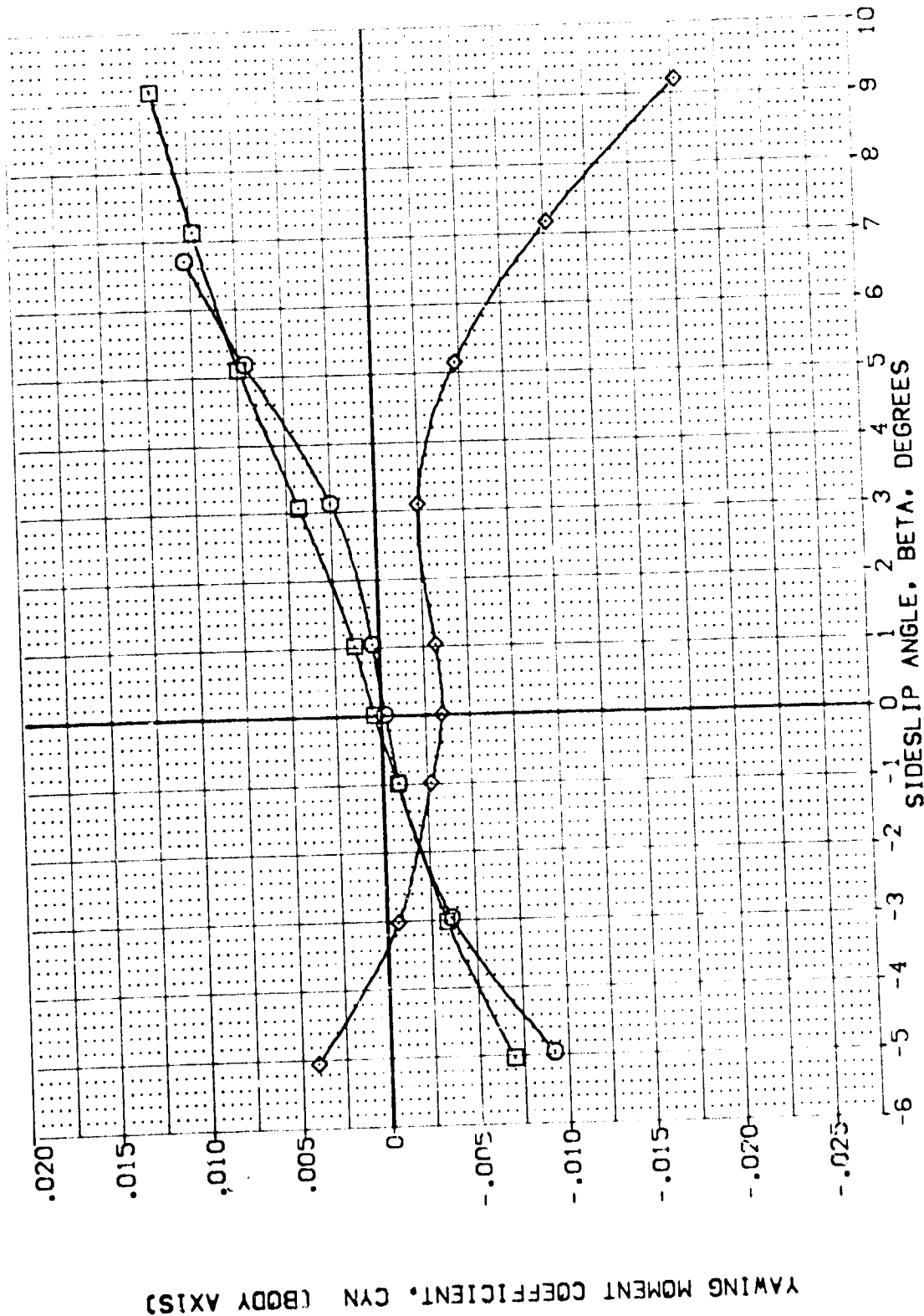


FIG. 13 LAT-DIR CHARACTERISTICS OF TOTAL VEHICLE-PART 3

(O)MACH = 1.05

DATA SET SYMBOL CONFIGURATION DESCRIPTION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BDF LAP	SPOBRK	ALLRON	REFERENCE INFORMATION
[AEJ039]	ARC 11-747 DA53A B C M F VI V	.000	-11.700	85.000	.000	SREF 2.4210 50.FT.
[AEJ040]	ARC 11-747 DA53A B C M F VI V	10.000	-11.700	85.000	.000	LREF 14.2440 N.
[AEJ041]	ARC 11-747 DA53A B C M F VI V	20.000	-11.700	85.000	.000	BREF 28.1004 N.
						XMRP 32.3010 N.
						YMRP .0000 N.
						ZMRP 11.2500 N.
						SCALE .0300

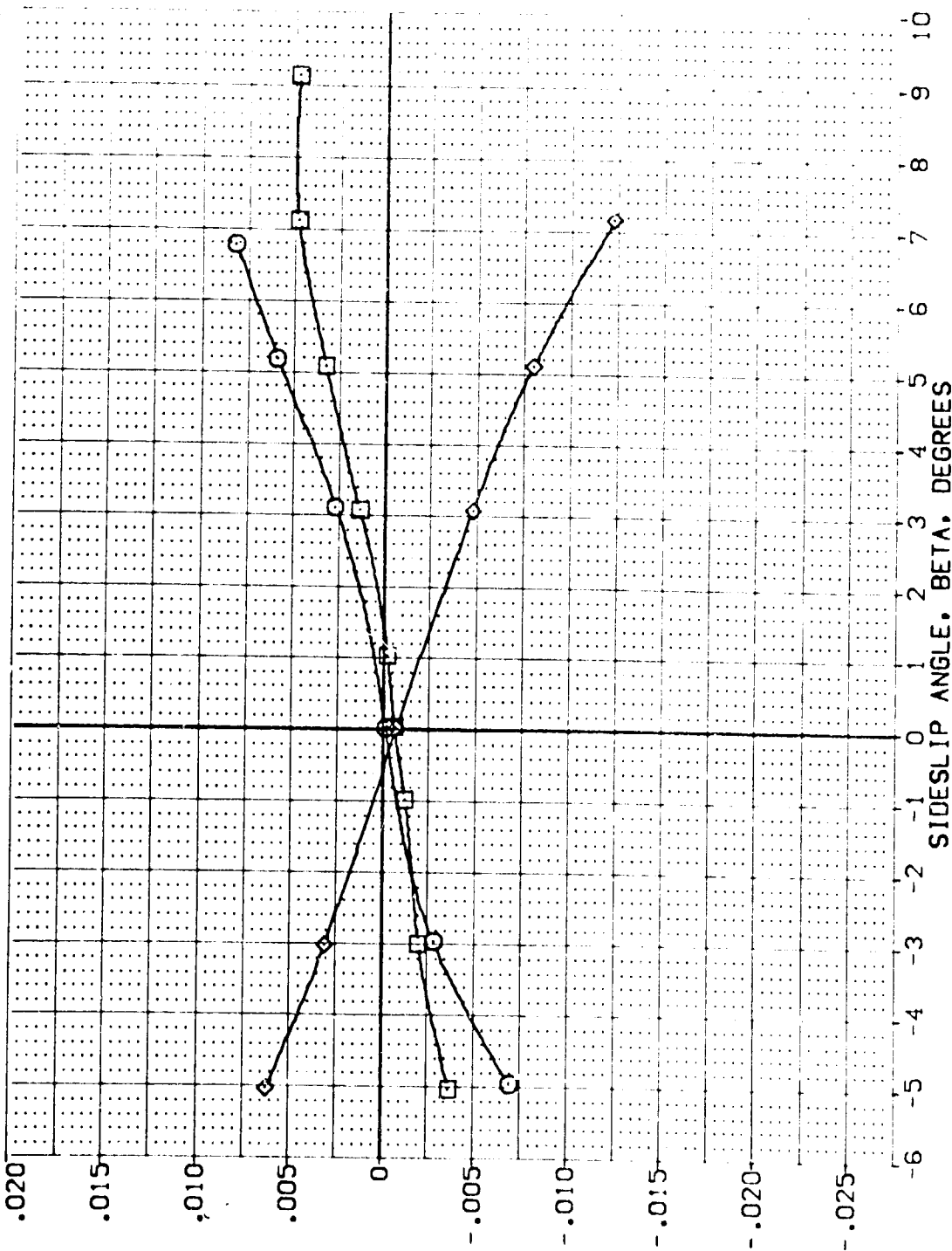


FIG. 13 LAT-DIR CHARACTERISTICS OF TOTAL VEHICLE-PART 3

(E)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NON: R/V/L	ALPHA	BOFLAP	SPOBRK	AILRON	REFERENCE INFORMATION
{AEJ028}	ARC 11-747 0A53A B C M F VI V	NON: R/V/L	.000	-11.700	85.000	.000	SREF 2.4210 SQ.FT.
{AEJ040}	ARC 11-747 0A53A B C M F VI V	NON: R/V/L	10.000	-11.700	85.000	.000	LREF 14.2440 IN.
{AEJ041}	ARC 11-747 0A53A B C M F VI V	NON: R/V/L	20.000	-11.700	85.000	.000	BREF 28.1004 IN.
							XMRP 32.3010 IN.
							YMRP .0000 IN.
							ZMRP 11.2500 IN.
							SCALE .0300

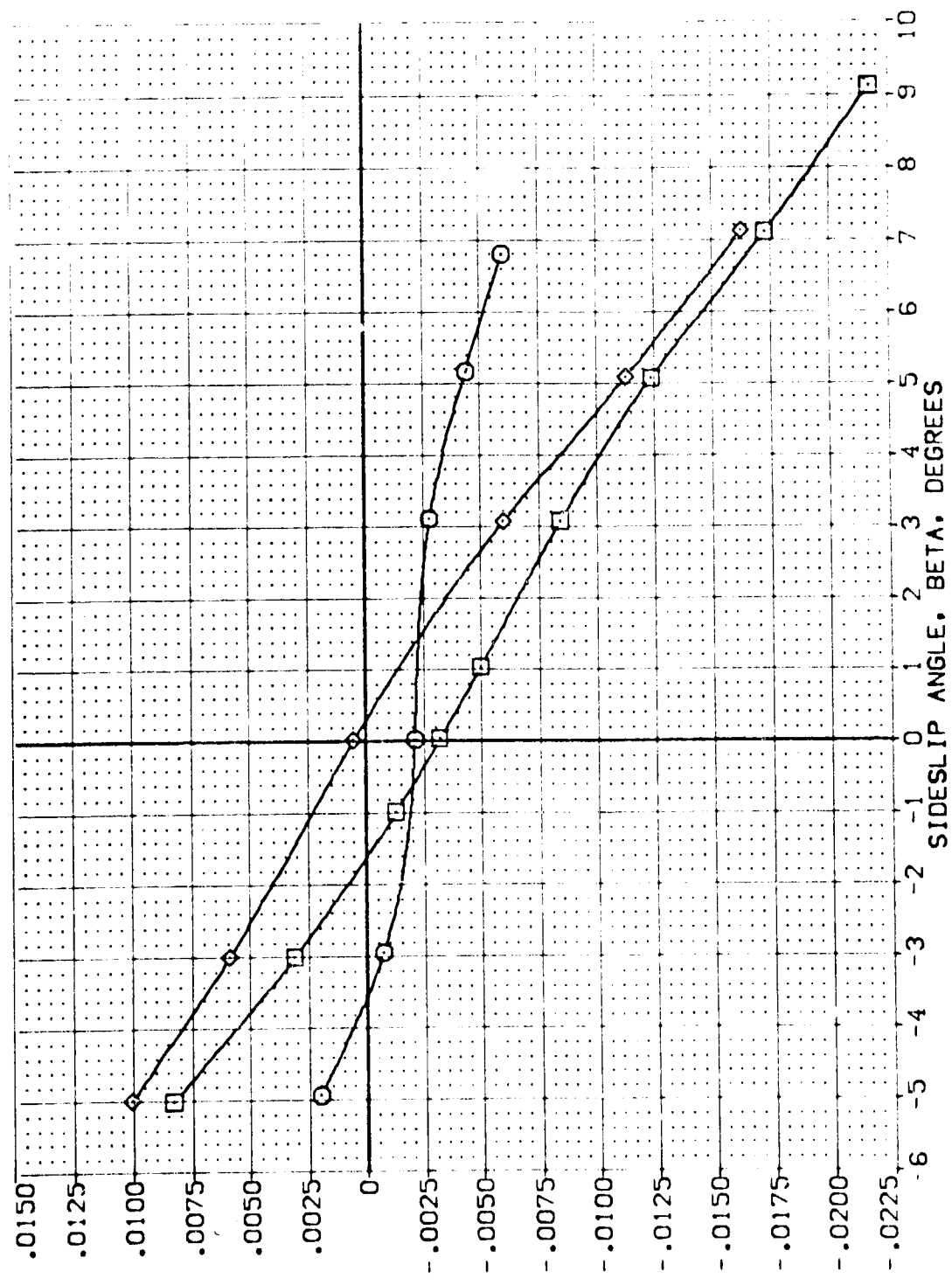
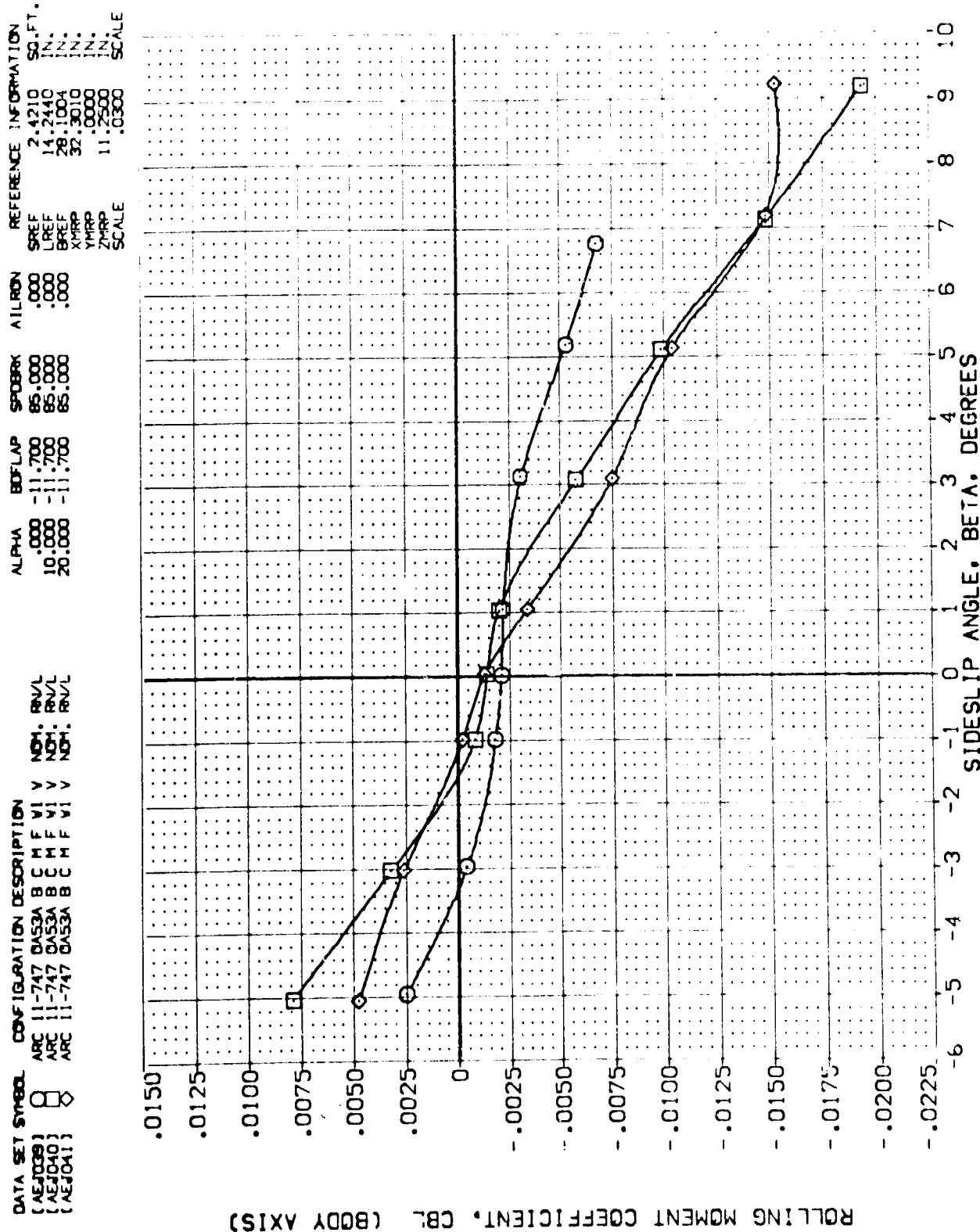


FIG. 13 LAT-Dir CHARACTERISTICS OF TOTAL VEHICLE-PART 3

(A)MACH = .60



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BDFLAP	SPDRBK	AIRRON	REFERENCE INFORMATION
(AEJ008)	ARC 11-747 D453A B C M F V1 V	0.000	-11.700	85.000	.000	SREF 2.4210 SQ.FT.
(AEJ010)	ARC 11-747 D453A B C M F V1 V	10.000	-11.700	85.000	.000	LREF 14.2440 IN.
(AEJ011)	ARC 11-747 D453A B C M F V1 V	20.000	-11.700	85.000	.000	BREF 28.1004 IN.
						YMRP 32.3010 IN.
						ZMRP 0.0000 IN.
						SCALE 11.2500 IN.
						SCALE .0300

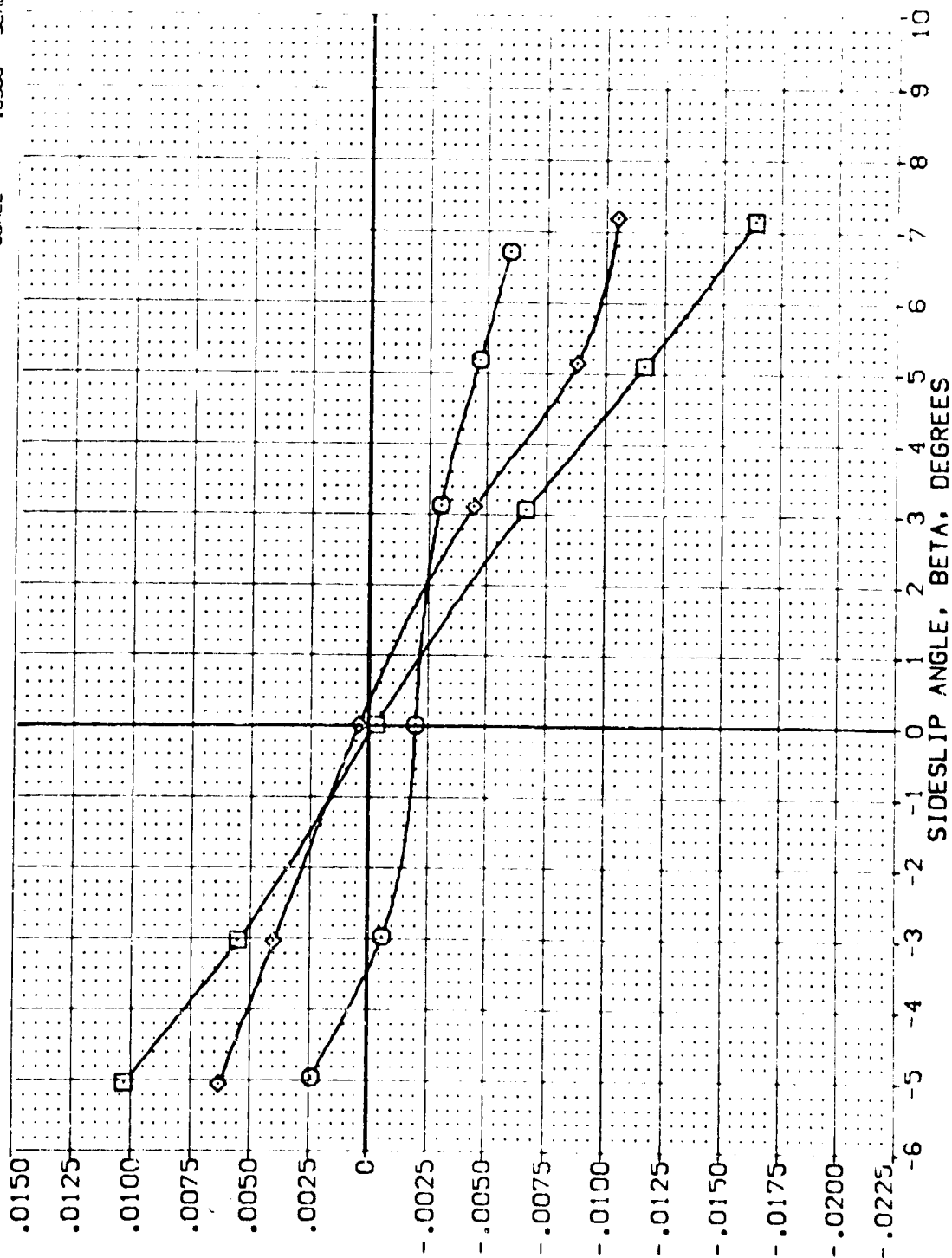


FIG. 13 LAT-DIR CHARACTERISTICS OF TOTAL VEHICLE-PART 3

(C)MACH = .90



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BDLAP	SPOBRK	ALIRON	REFERENCE INFORMATION
(AE7038)	ARC 11-747 DAS3A B C M F V1 V	.000	-11.700	85.000	.000	SREF 2.4210 50. FT.
(AE7040)	ARC 11-747 DAS3A B C M F V1 V	10.000	-11.700	85.000	.000	LREF 14.2440 IN.
(AE7041)	ARC 11-747 DAS3A B C M F V1 V	20.000	-11.700	85.000	.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

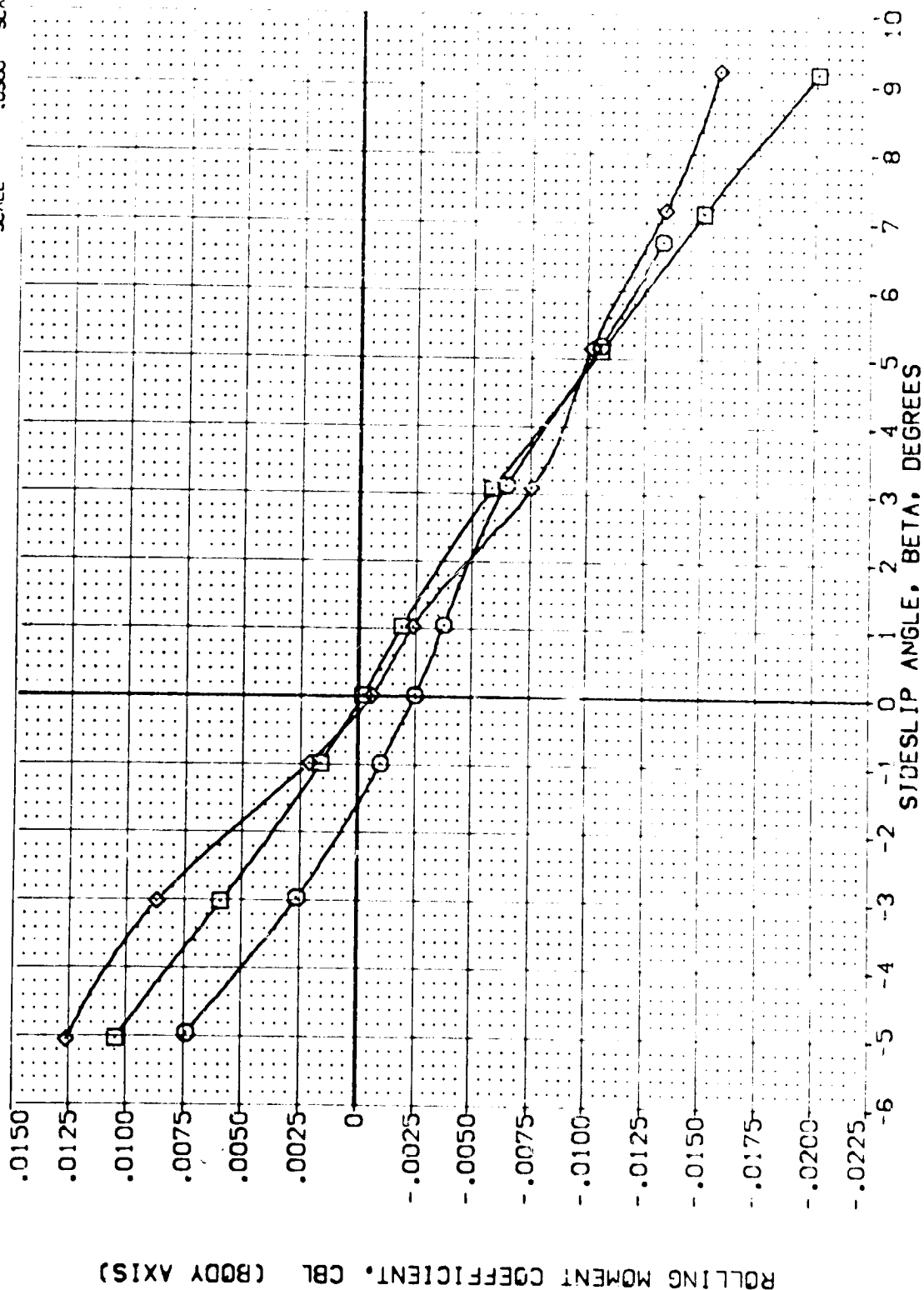


FIG. 13 LAT-DIR CHARACTERISTICS OF TOTAL VEHICLE-PART 3

(C) VACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BDF LAP	SPOBRK	ALLRON	REFERENCE INFORMATION
(AEJ009)	ARC 11-747 DA53A B C M F V	.000	-11.700	85.000	.000	SREF 2.4210 50. FT.
(AEJ010)	ARC 11-747 DA53A B C M F V	10.000	-11.700	85.000	.000	LREF 14.2440 IN.
(AEJ041)	ARC 11-747 DA53A B C M F V	20.000	-11.700	85.000	.000	BREF 28.0040 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.7500 IN.
						SCALE .0300

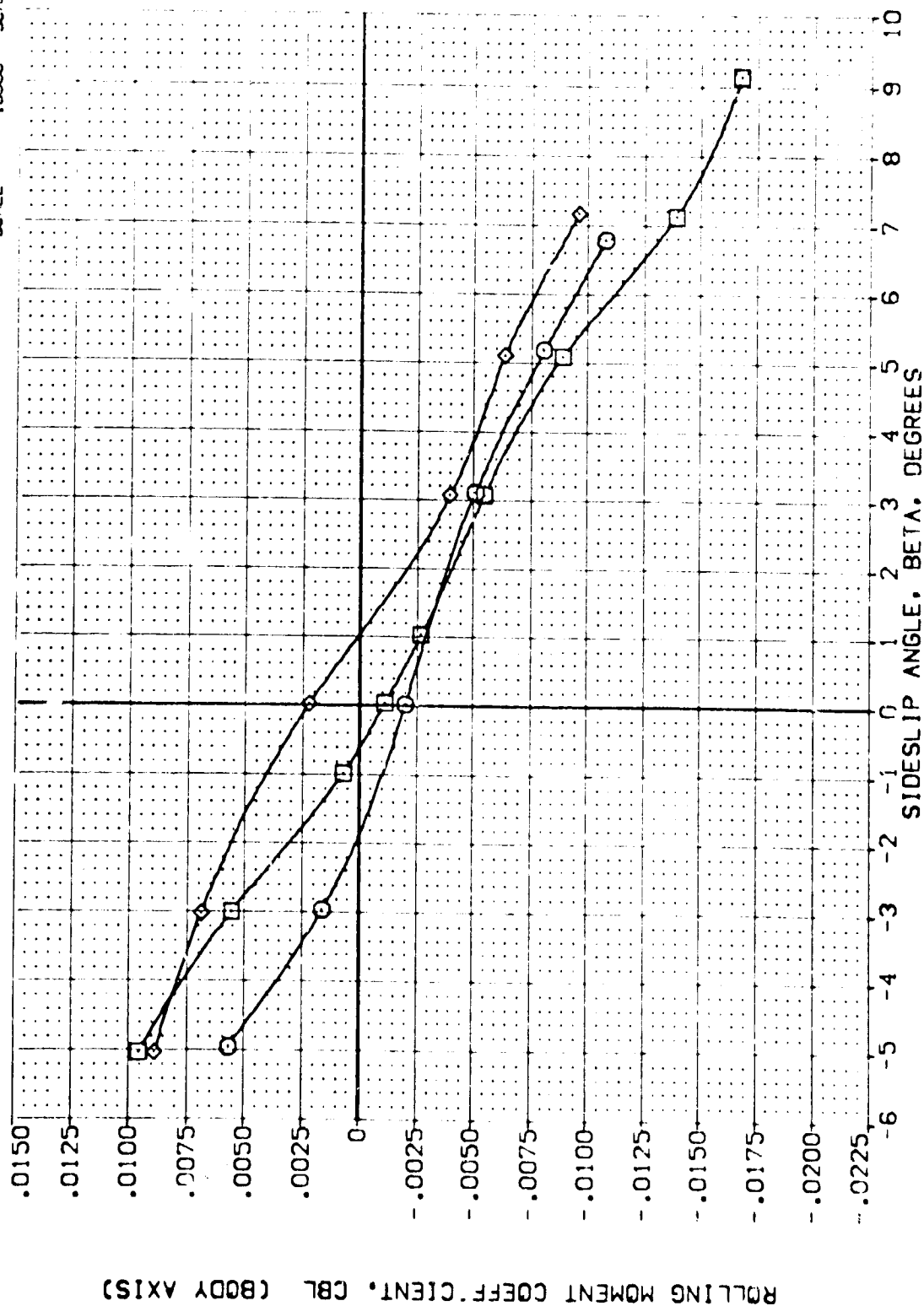


FIG. 13 LAT-DIR CHARACTERISTICS OF TOTAL VEHICLE-PART 3

(E)MACH = 1.20

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (AEJ012)

SYMBOL  
O

MACH  
.600

ELEVON  
BOFLAP  
RUDDER  
ELEV-R

PARAMETRIC VALUES  
.000  
-11.700  
.000  
.000

.000  
25.000  
.000

DATA SOURCE  
ALPHA  
20.000

DATASET  
AEJ013  
AEJ014

REFERENCE INFORMATION  
SREF 2.4210 SQ.FT.  
LREF 14.2440 IN.  
BREF 28.1004 IN.  
XRRP 32.3010 IN.  
YRRP 11.2500 IN.  
ZRRP .0300 IN.  
SCALE

SIDE FORCE COEFFICIENT DERIVATIVE WITH BETA, CYBETA, PER DEGREE

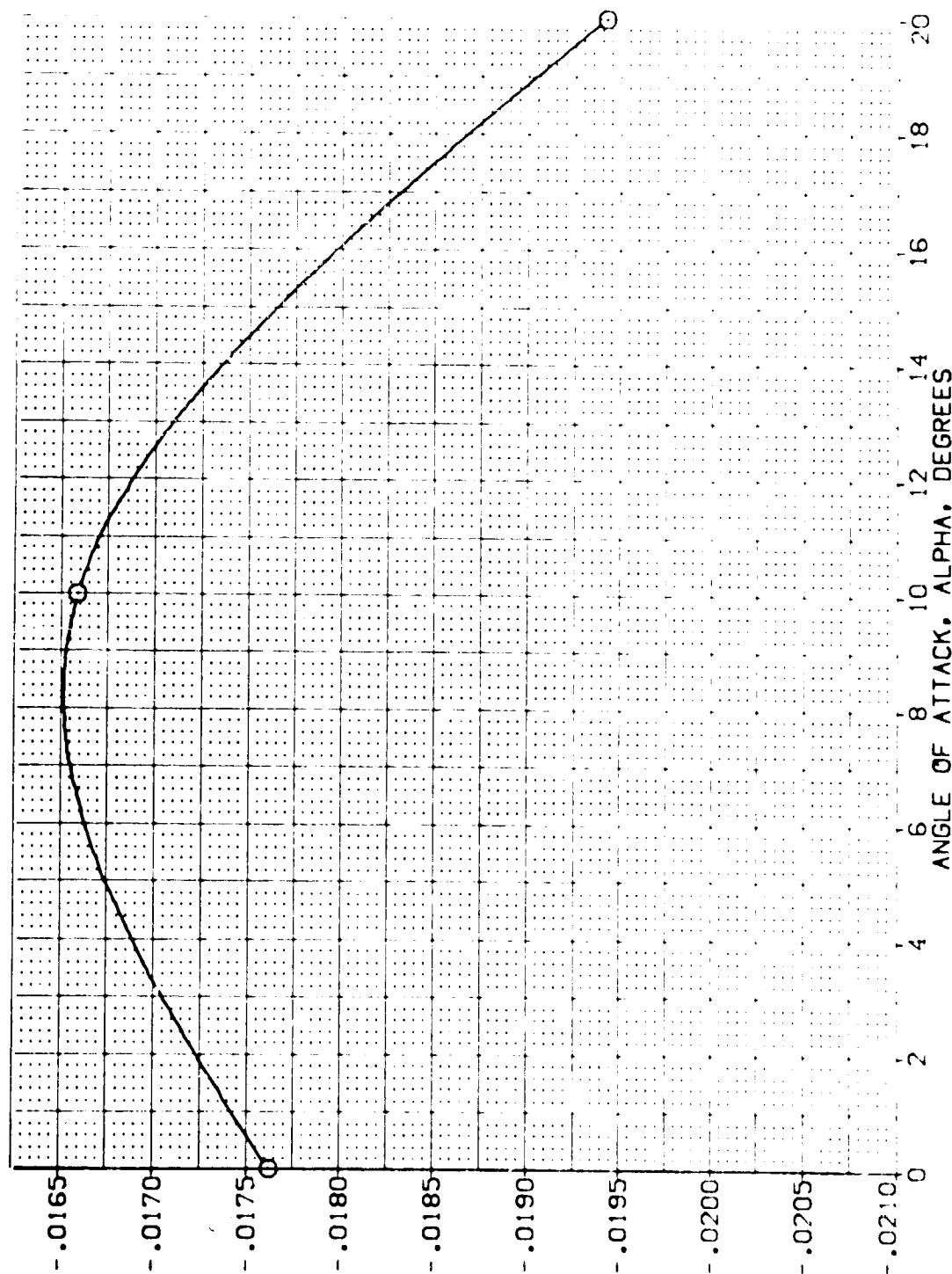


FIG. 14 LAT-DIR DERIVATIVES OF TOTAL VEHICLE-PART 1

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (AEJ012)

SYMBOL	MACH	PARAMETRIC VALUES				DATA SOURCE		REFERENCE INFORMATION			
0	.759	ELEVON	.000	AILRON	.000	AEJ012	ALPHA	10.000	SREF	2.4210	SQ.FT.
		BDCLAP	-11.700	SPDBRK	25.000	AEJ012	AEJ013	10.000	LREF	14.2440	IN.
		RUDDER	.000	ELEV-L	.000	AEJ014			BREF	28.1004	IN.
		ELEV-R	.000						XMRP	32.3010	IN.
									YMRP	.0000	IN.
									ZMRP	11.2500	IN.
									SCALE	.0300	SCALE

SIDE FORCE COEFFICIENT DERIVATIVE WITH BETA, CYBETA, PER DEGREE

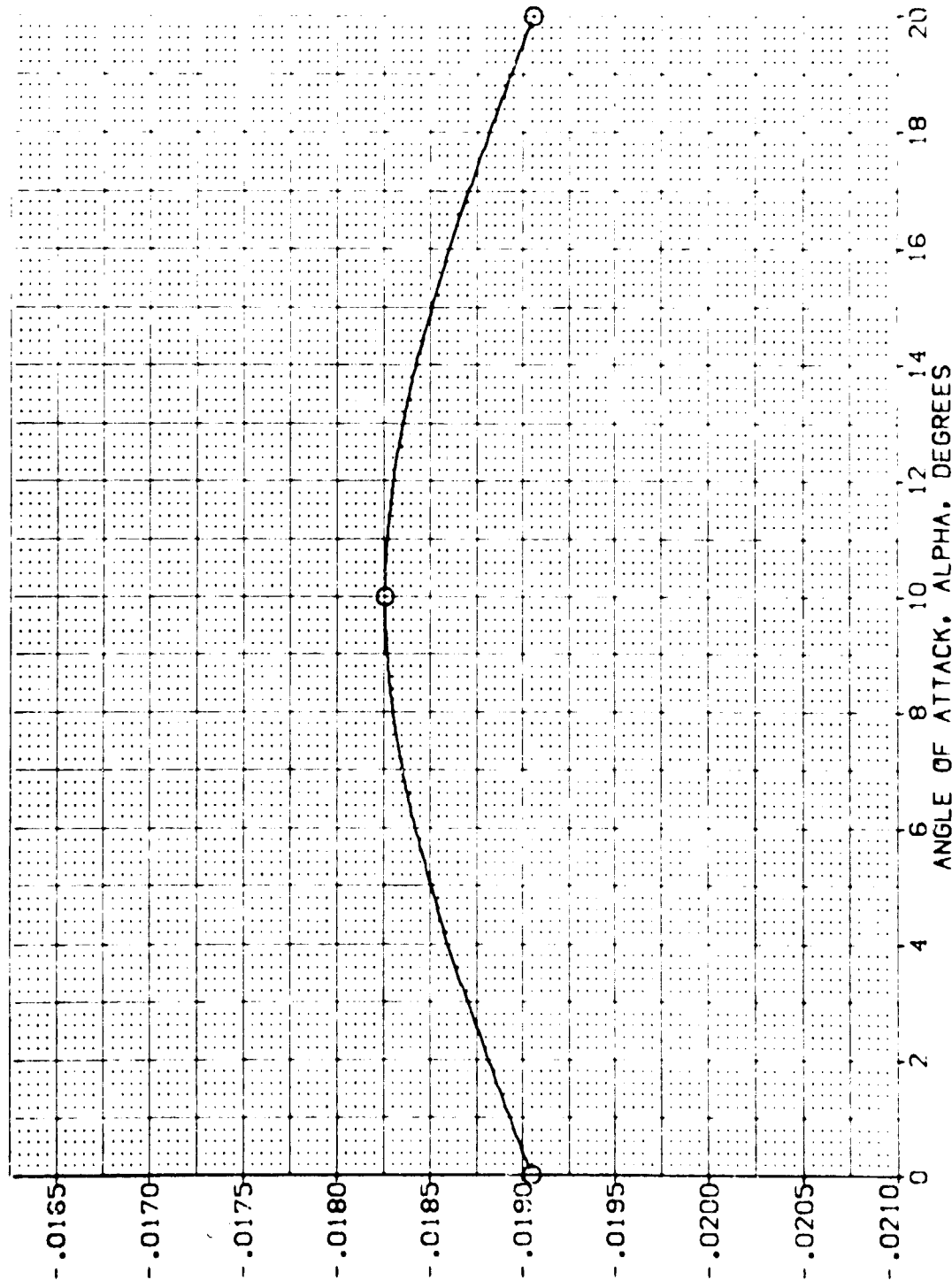


FIG. 14 LAT-DIR DERIVATIVES OF TOTAL VEHICLE-PART 1

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (AEJ012)

SYMBOL O	MACH .800	PARAMETRIC VALUES				DATA SOURCE		REFERENCE INFORMATION			
		ELEVON	.000	AILRON	.000	DATA SET	ALPHA	SREF	2.4210	SG.FT.	
		BOFLAP	-11.700	SPOBRK	25.000	AEJ012	10.000	LREF	14.2440		
		RUDER	.000	ELEV-L	.000	AEJ014	20.000	BREF	28.1004		
		ELEV-R	.000				XTRP	32.3010			
							YTRP	.0000			
							ZTRP	11.2500			
							SCALE	.0300	SCALE		

SIDE FORCE COEFFICIENT DERIVATIVE WITH BETA, CYBETA, PER DEGREE

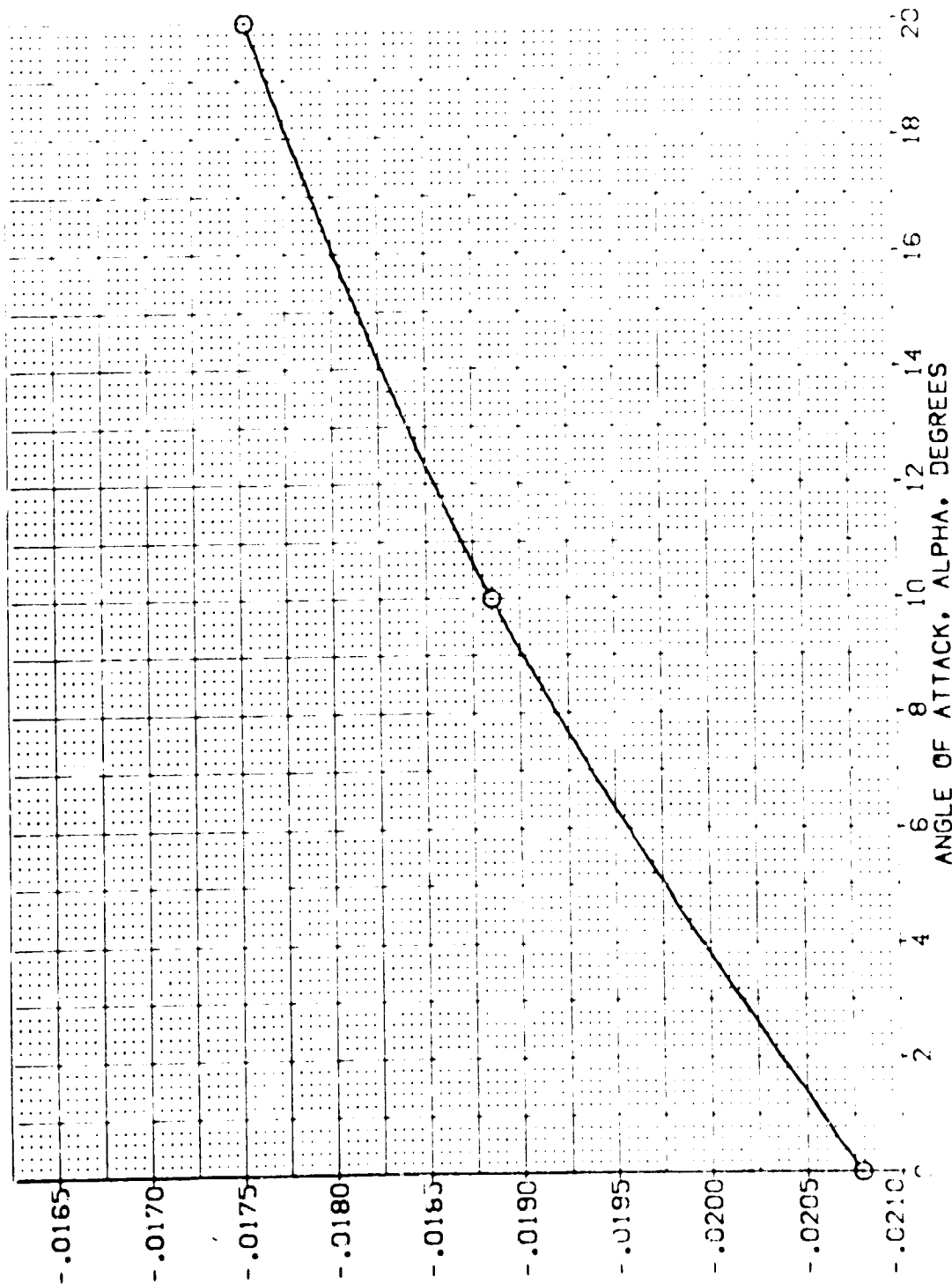


FIG. 14 LAT-SIF DERIVATIVES OF TOTAL VEHICLE-PART 1

(AEJ012)

1.05  
HOM

PARAMETER	
	.000
	-11.700
	.000
	.000

000.  
000.  
000.

000000

HA  
0000

0040 INFORMATION

SIDE FORCE COEFFICIENT DERIVATIVE WITH BETA, CYBETA, PER DEGREE

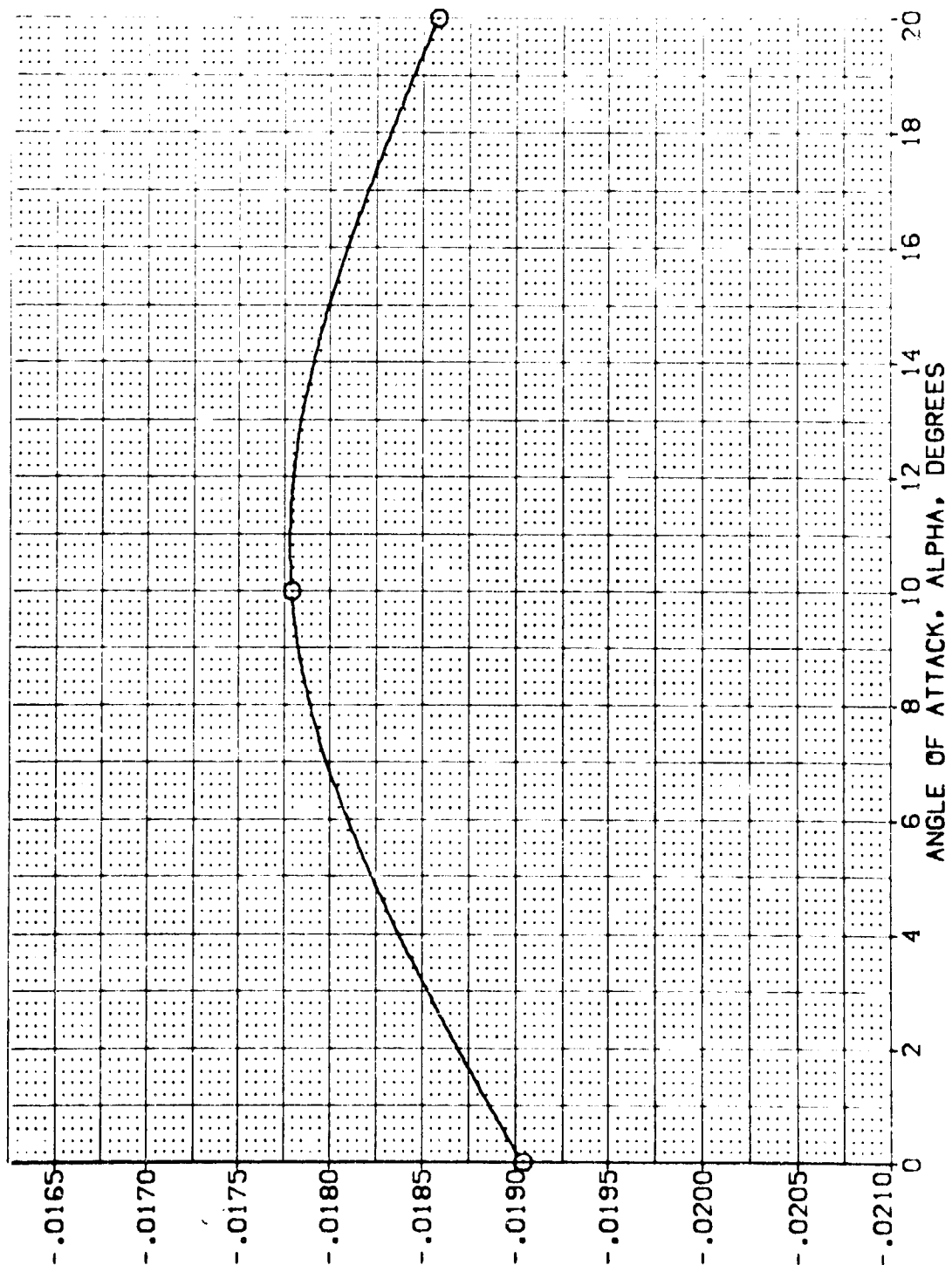


FIG. 14 LAT-DIR DERIVATIVES OF TOTAL VEHICLE-PART I

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (AEJ012)

SYMBOL MACH  
O 1.203

PARAMETRIC VALUES  
ELEVON .000 AILRON .000 DATASET .000 AEJ012  
BOFLAP -11.700 SPOBRK 25.000 AEJ014  
RUDDER .000 ELEV-L .000  
ELEV-R .000

DATA SOURCE  
ALPHA 20.000

REFERENCE INFORMATION  
SREF 2.4210 SQ.FT.  
LREF 14.2440  
BREF 28.1004  
XMRP 32.3010  
YMRP .0000  
ZMRP 11.2500  
SCALE IN.

SIDE FORCE COEFFICIENT DERIVATIVE WITH BETA, CYBETA, PER DEGREE

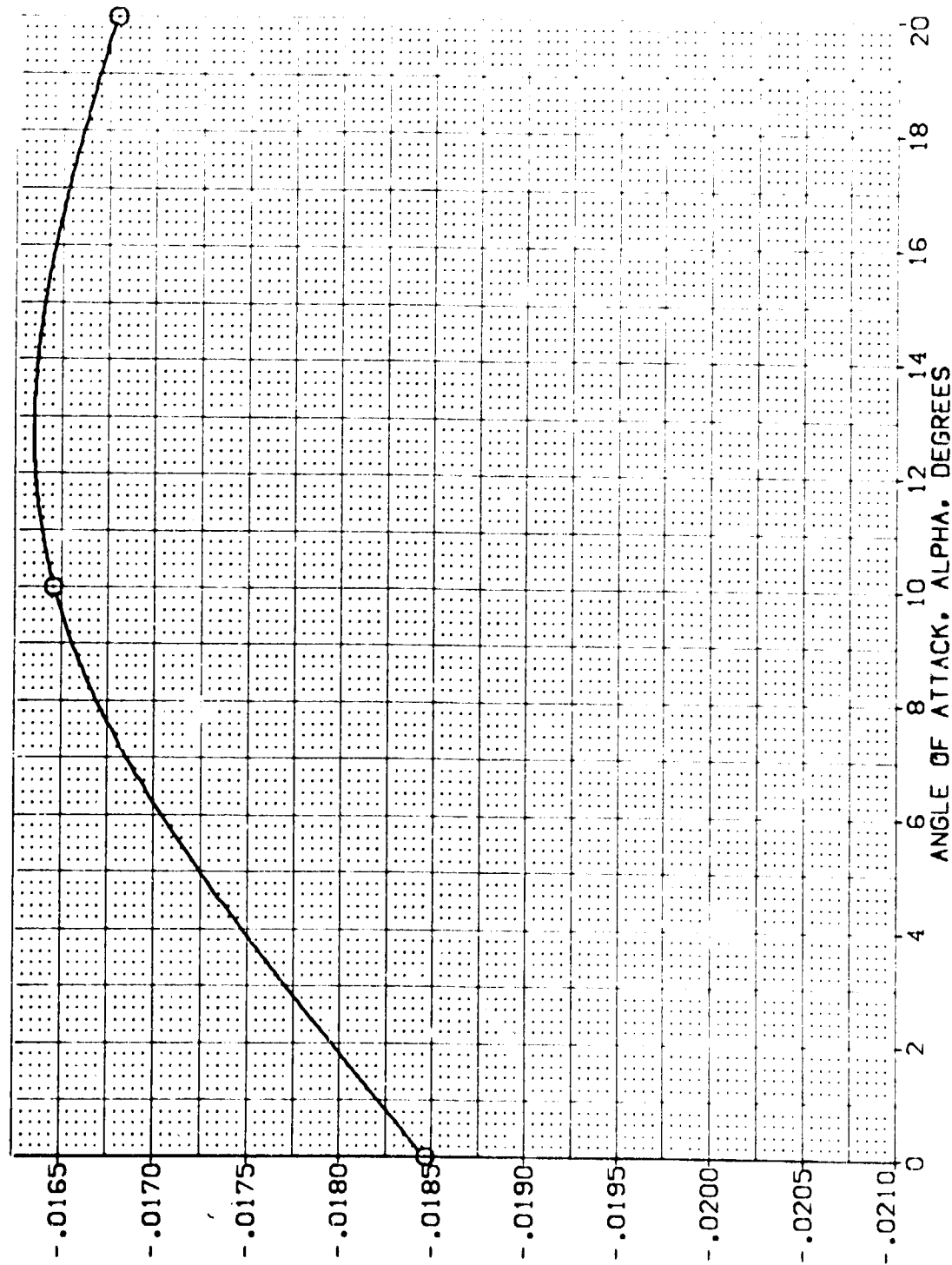


FIG. 14 LAT-DIR DERIVATIVES OF TOTAL VEHICLE-PART 1

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (AEJ012)

SYMBOL	MACH	ELEVON	BOFLAP	RUDDER	ELEV-R	PARAMETRIC VALUES	DATA SOURCE	REFERENCE INFORMATION
○	.600	.000	-11.700	.000	.000	AILRON	ALPHA	SREF
						SPOBRK	AEJ012	LREF
						ELEV-L	AEJ014	EREF
								YPRP
								ZPRP
								SCALE
								2.4210
								14.2440
								28.1004
								32.3010
								11.2500
								.0300

YAWING MOMENT COEFFICIENT DERIVATIVE WITH BETA, CYNBET, PER DEGREE

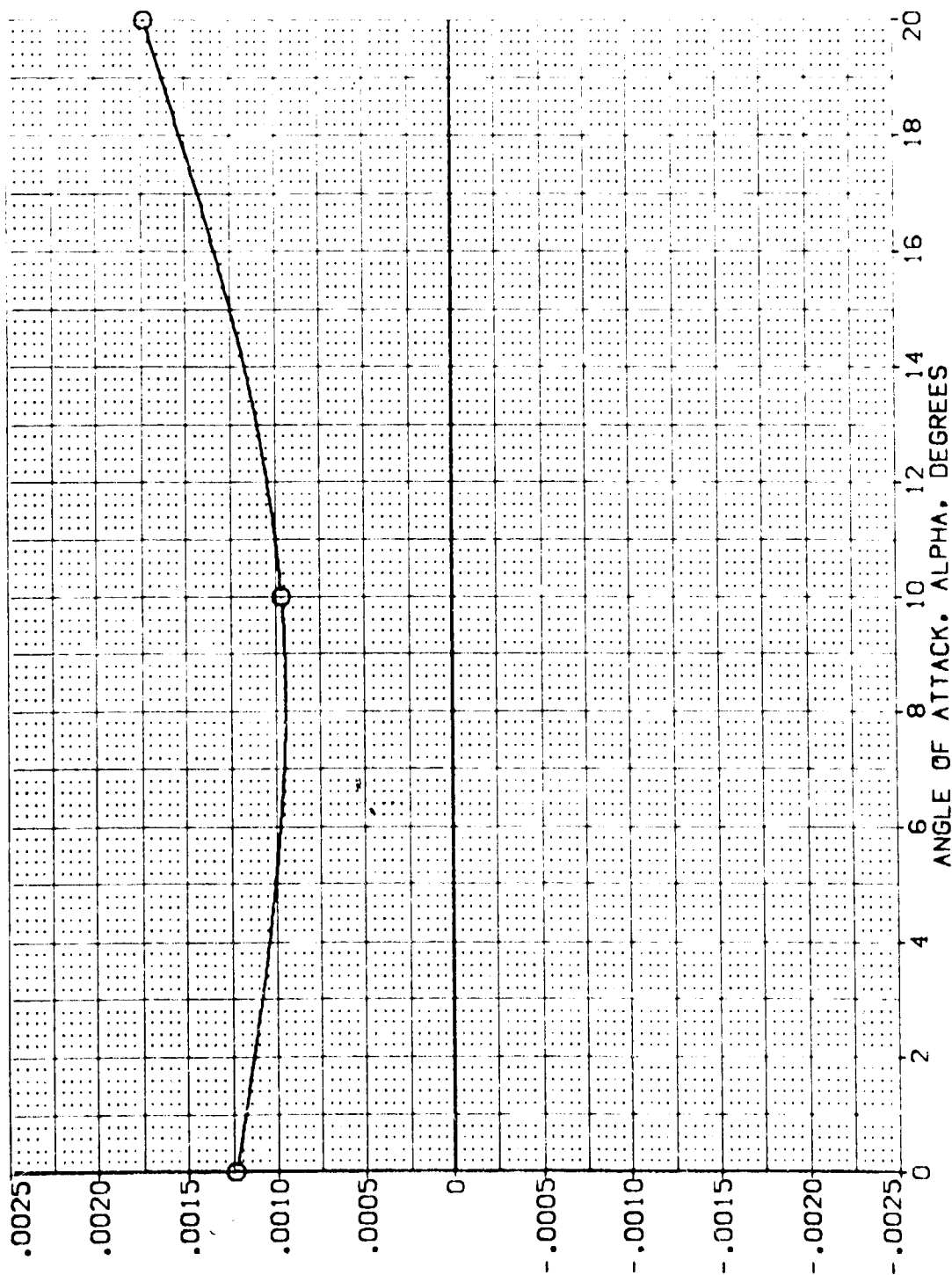


FIG. 14 LAT-DIR DERIVATIVES OF TOTAL VEHICLE-PART 1



ARC 11-747 0A53A B C M F W1 V NOM. RN/L (AEJ012)

SYMBOL	MACH	PARAMETRIC VALUES	DATA SOURCE	REFERENCE INFORMATION
○	.799	ELEVON BOFLAP RUDDER ELEV-R	.000 25.000 .000 20.000	SREF LREF BREF XREF YREF ZREF SCALE
		AIRION SPDRK LEV-L	.000 AEJ012 AEJ014	2.1210 14.2440 28.100 32.3010 11.2500 11.2500 .0300
				IN: IN: IN: IN: IN: IN: SCALE

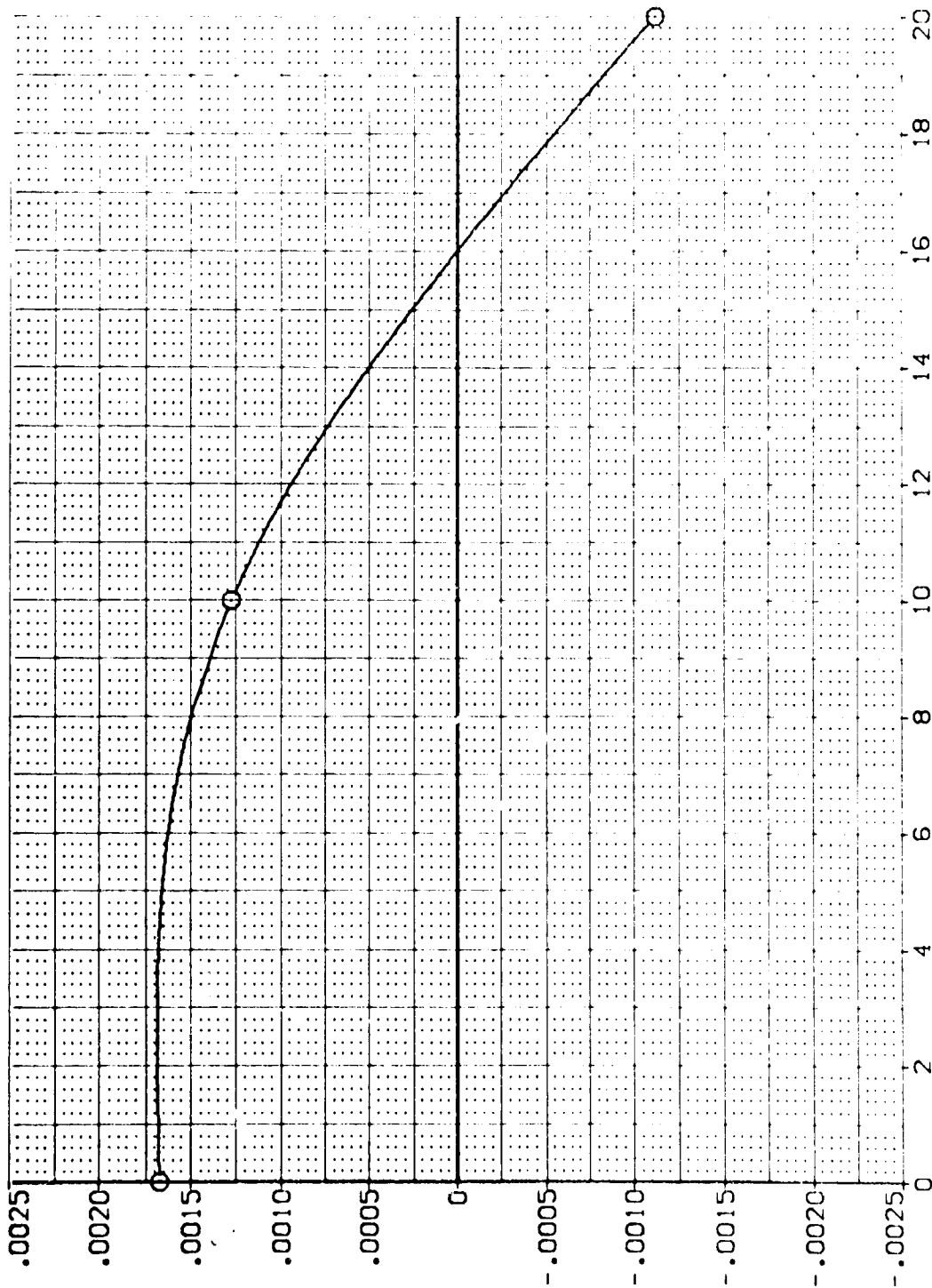
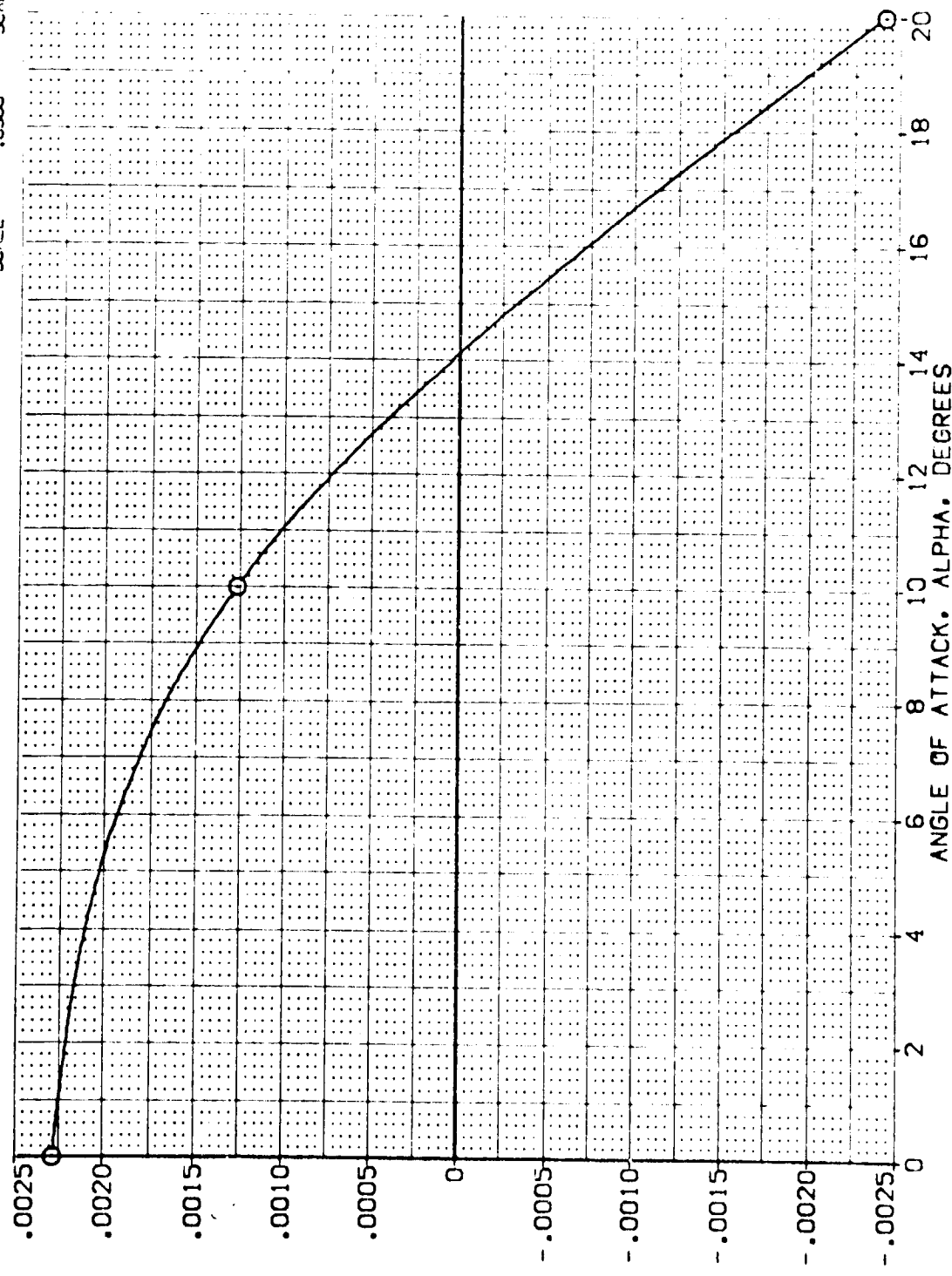


FIG. 14 LAT-QIR DERIVATIVES OF TOTAL VEHICLE-PART 1



ARC 11-747 0A53A B C M F W1 V NOM. RN/L (AEJ012)

SYMBOL		MACH		PARAMETRIC VALUES				DATA SOURCE		REFERENCE INFORMATION	
O		.900	ELEVON	.000	AIRLON	.000	DATASET	ALPHA	ALPHA	SREF	2.4210
			BOFLAP	-11.700	SPOBRK	25.000	AEJ012	.000	LREF	14.2440	
			RUDDER	.000	ELEV-L	.000	AEJ014	20.000	BREF	28.1004	
			ELEV-R	.000					XMRP	32.3010	
									YMRP	.0000	
									ZMRP	11.2500	
									SCALE	.0300	
										SQ.FT.	
										IN.	
										IN.	
										IN.	
										IN.	
										IN.	
										SCALE	



YAWING MOMENT COEFFICIENT DERIVATIVE WITH BETA, CYNBET, PER DEGREE

FIG. 14 LAT-DIR DERIVATIVES OF TOTAL VEHICLE-PART 1

ARC 11-747 0A53A B C M F W 1 V NOM. RN/L (AEJ012)

SYMBOL	MACH	PARAMETRIC VALUES				DATA SOURCE				REFERENCE INFORMATION			
0	1.051	ELEVON	.000	AILRON	.000	DATASET	ALPHA	SREF	2.4210	SQ.FT.			
		BOFLAP	-11.700	SPOBRK	25.000	AEJ012	10.000	LREF	14.2440				
		RUDDER	.000	ELEV-L	.000	AEJ014	20.000	BREF	28.1004				
		ELEV-R	.000					XMRP	32.3010				
								YMRP	11.2500				
								ZMRP	.0300				
								SCALE					

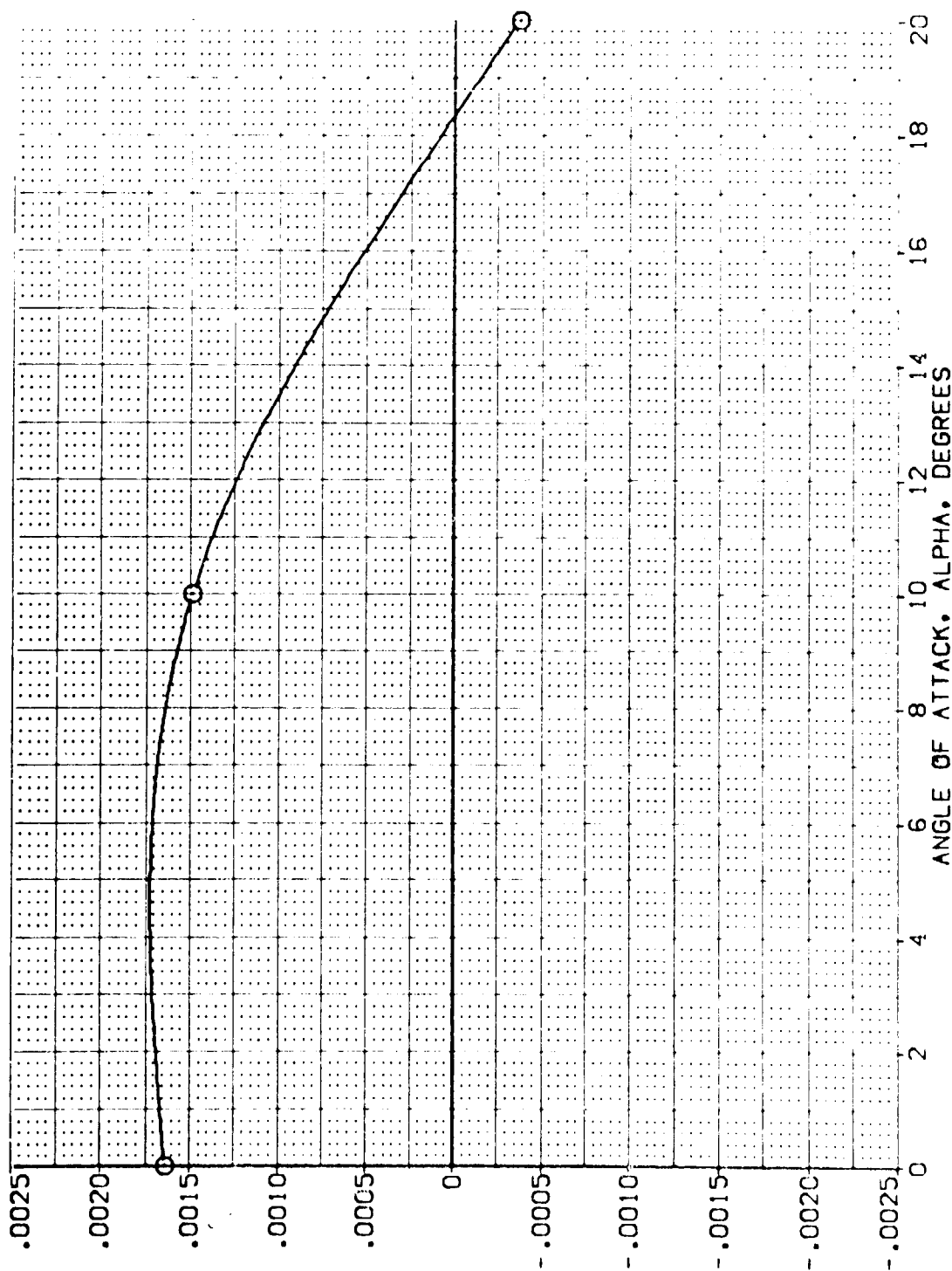


FIG. 14 LAT-DIR DERIVATIVES OF TOTAL VEHICLE-PART 1

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (AEJ012)

SYMBOL O	MACH 1.203	PARAMETRIC VALUES			DATA SOURCE		REFERENCE INFORMATION		
		ELEVON BOFLAP RUDDER ELEV-R	.000 -11.700 .000 .000	AILRON SPDRK ELEV-L	.000 25.000 .000 20.000	AEJ012 AEJ014	ALPHA 10.000	SREF LREF BREF XMRP YMRP ZMRP SCALE	2.4210 14.2440 28.1004 32.3010 .0000 11.2500 .0300

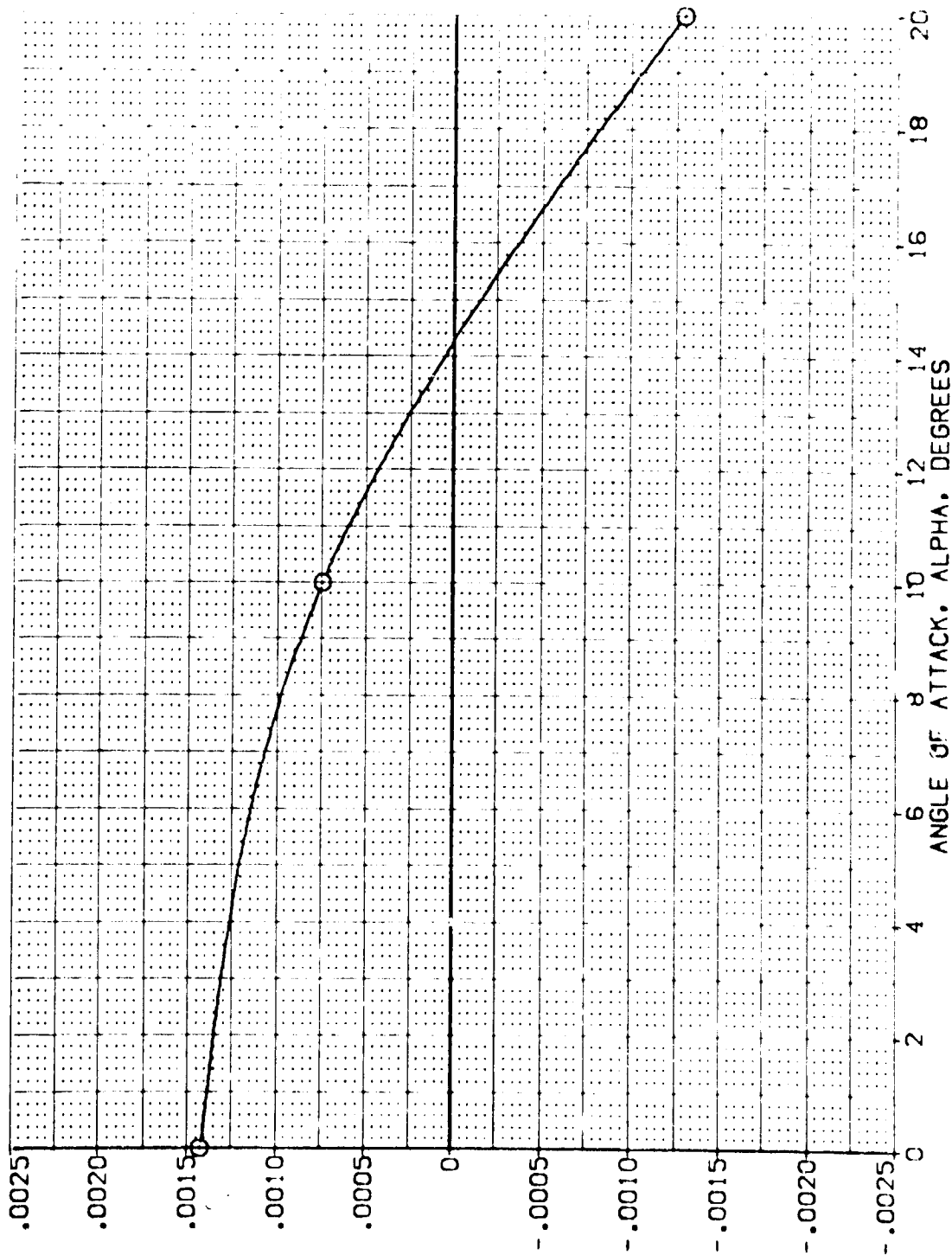


FIG. 14 LAT-DIR DERIVATIVES OF TOTAL VEHICLE-PART 1

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (AEJ012)

SYMBOL	MACH	PARAMETRIC VALUES				DATA SOURCE		REFERENCE INFORMATION			
○	.600	ELEVON	.000	AILRON	.000	DATASET	ALPHA	SREF	LREF	SREF	SQ.FT.
		BOFLAP	-11.700	SPOBRK	25.000	AEJ012	10.000	14.2440	14.2440	IN.	IN.
		RUDDER	.000	ELEV-L	.000	AEJ014	20.000	28.1004	28.1004	IN.	IN.
		ELEV-R	.000					32.3010	32.3010	IN.	IN.
								11.2500	11.2500	IN.	IN.
								SCALE	SCALE	SCALE	SCALE

ROLLING MOMENT COEFFICIENT DERIVATIVE WITH BETA, CBLBET, PER DEGREE

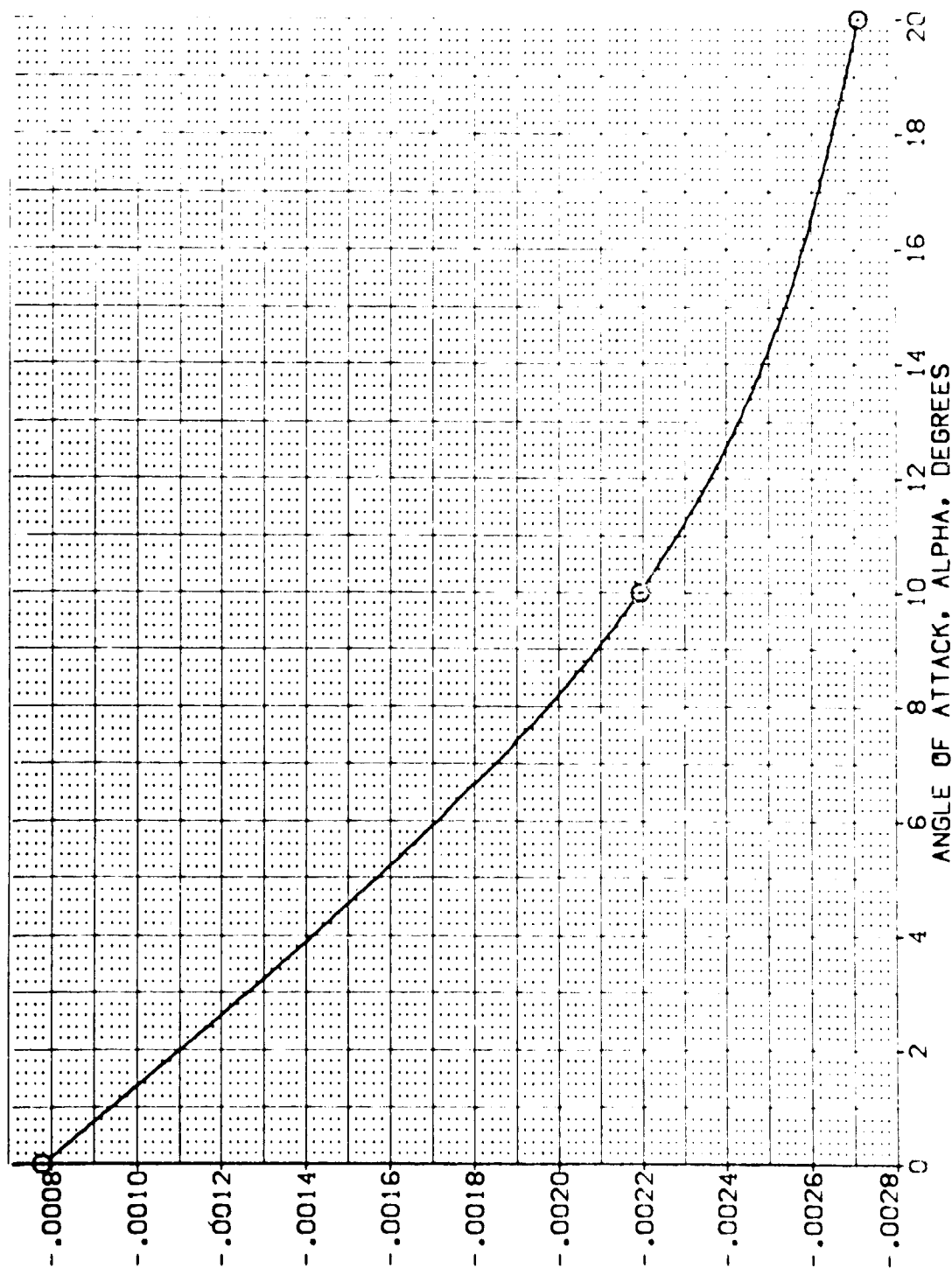


FIG. 14 LAT-DIR DERIVATIVES OF TOTAL VEHICLE-PART 1

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (AEJ012)

SYMBOL MACH  
O .759

PARAMETRIC VALUES  
ELEVON .000 AILRON  
BOFLAP -11.700 SPOBRK  
RUDDER .000 ELEV-L  
ELEV-R .000

DATA SOURCE  
ALPHA .000  
AEJ012 25.000  
AEJ014 .000

DATASET  
AEJ013 10.000

REFERENCE INFORMATION  
SREF 2.4210 SQ.FT.  
LREF 14.2440 IN.  
BREF 28.1004 IN.  
XMRP 32.3010 IN.  
YMRP .0000 IN.  
ZMRP 11.2500 IN.  
SCALE .0300

ROLLING MOMENT COEFFICIENT DERIVATIVE WITH BETA, CBLBET, PER DEGREE

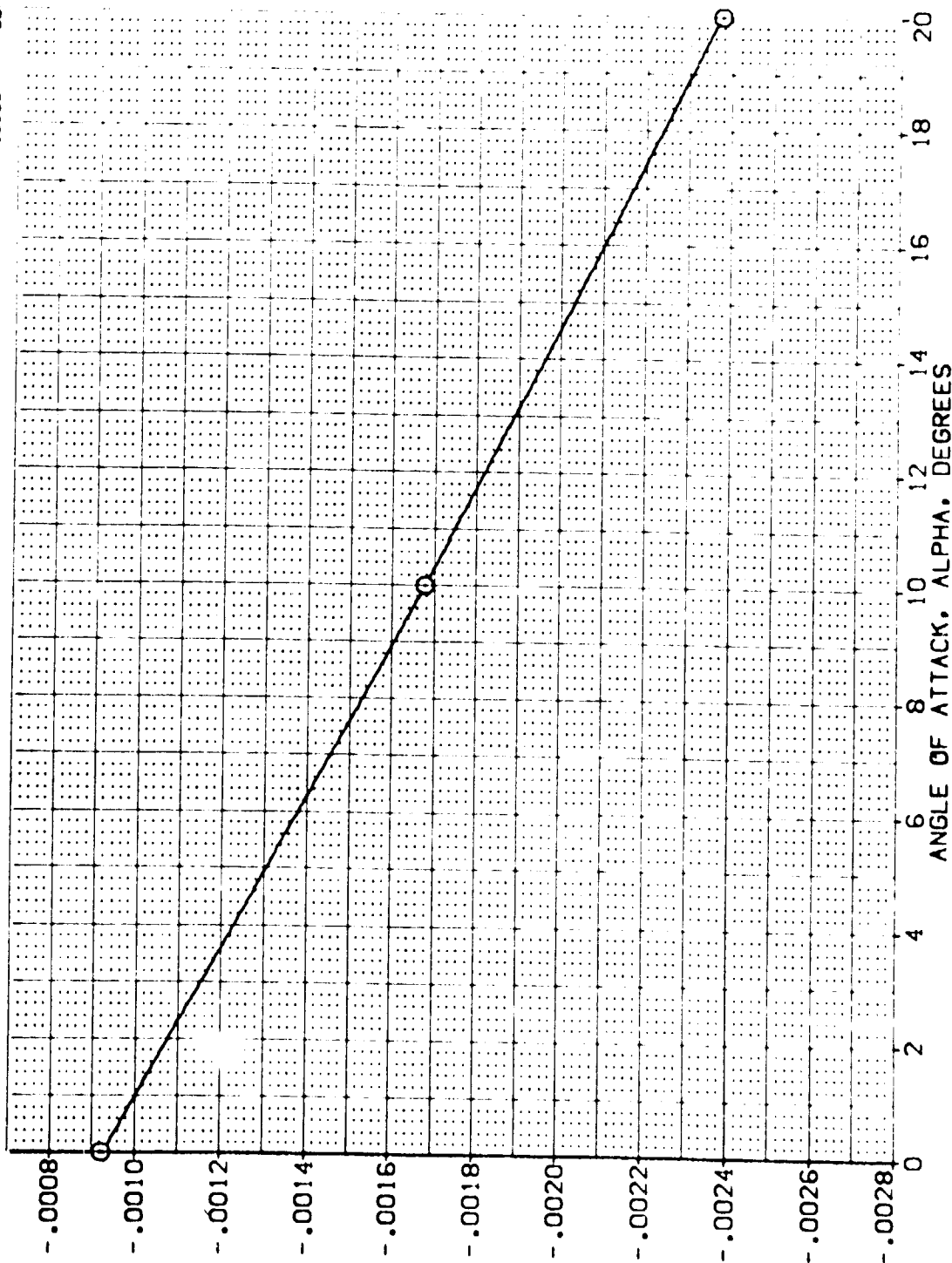


FIG. 14 LAT-DIR DERIVATIVES OF TOTAL VEHICLE-PART 1

ARC 11-747 0A53A B C M F W I V NOM. RN/L (AEJ012)

SYMBOL	MACH	PARAMETRIC VALUES				DATA SOURCE		REFERENCE INFORMATION			
0	.900	ELEVON	.000	AILRON	.000	AEJ012	ALPHA	10.000	SREF	2.4210	50.FT.
		BOFLAP	-11.700	SPODRK	25.000	AEJ014			LREF	14.2440	IN.
		RUDDER	.000	ELEV-L	.000				BREF	28.1004	IN.
		ELEV-R	.000						XMRP	32.3010	IN.
									YMRP	.0000	IN.
									ZMRP	11.2500	IN.
									SCALE	.0300	SCALE

ROLLING MOMENT COEFFICIENT DERIVATIVE WITH BETA, CBLBET, PER DEGREE

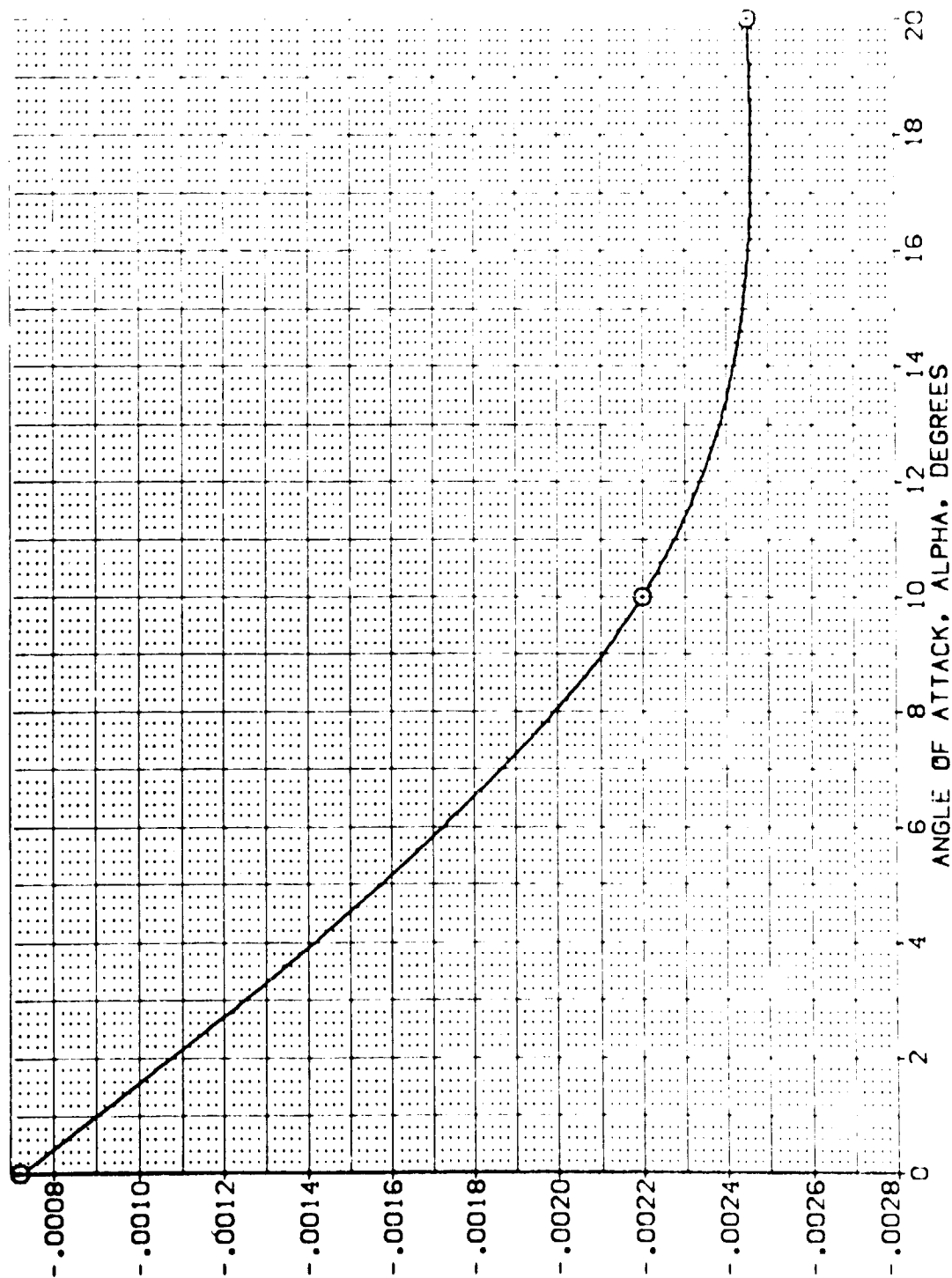


FIG. 14 LAT-DIR DERIVATIVES OF TOTAL VEHICLE--PART 1



ARC 11-747 0A53A B C M F W1 V NOM. RN/L (AEJ012)

SYMBOL MACH  
O 1.051

PARAMETRIC VALUES  
ELEVON .000 AILRON  
BOFLAP -11.700 SPOBRK  
RUDDER .000 ELEV-L  
ELEV-R .000

DATA SOURCE  
ALPHA .000 DATASET  
AEJ012 25.000 AEJ014  
20.000

REFERENCE INFORMATION  
SREF 2.4210 SQ.FT.  
LREF 14.2440 IN.  
BREF 28.1004 IN.  
XMRP 32.3010 IN.  
YMRP 11.7500 IN.  
ZMRP .0360 IN.  
SCALE

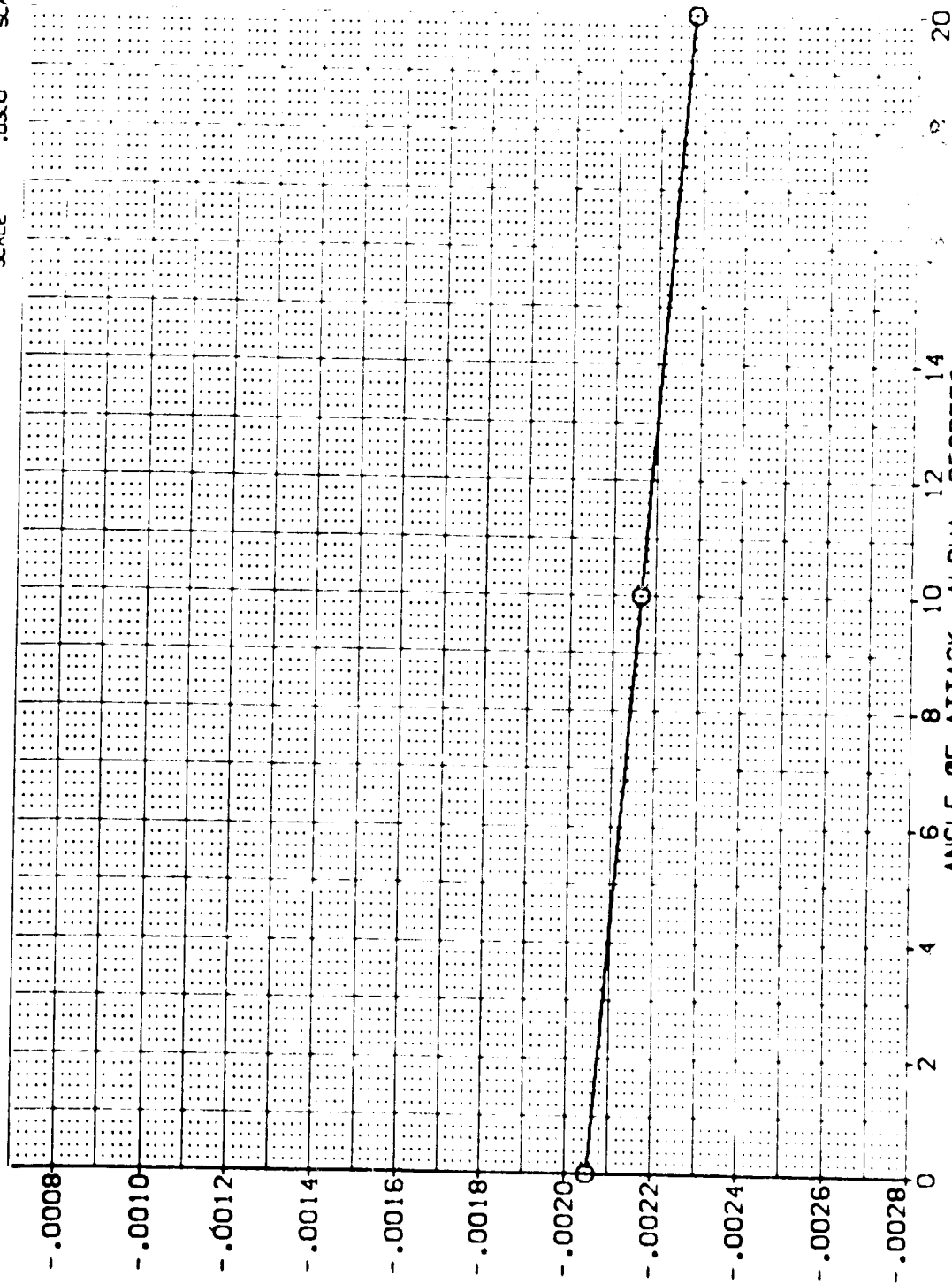


FIG. 14 LAT-DIR DERIVATIVES OF TOTAL VEHICLE-PART 1



ARC 11-747 0A53A B C M F W1 V NUM. RN/L (AEJ012)

SYMBOL	MACH	PARAMETRIC VALUES				DATA SOURCE		REFERENCE INFORMATION			
○	1.203	ELEVON	.000	AILRON	.000	AEJ012	ALPHA	10.000	SREF	2.4210	50.F.T.
		BOFLAP	-11.700	SPOBRK	25.000	AEJ014			LREF	14.2440	N.
		RUDDER	.000	ELEV-L	.000				BREF	28.1004	N.
		ELEV-R	.000						YPRP	32.3010	N.
									ZPRP	.0000	N.
									SCALE	11.2500	N.
										.0300	SCALE

ROLLING MOMENT COEFFICIENT DERIVATIVE WITH BETA, CBLBET, PER DEGREE

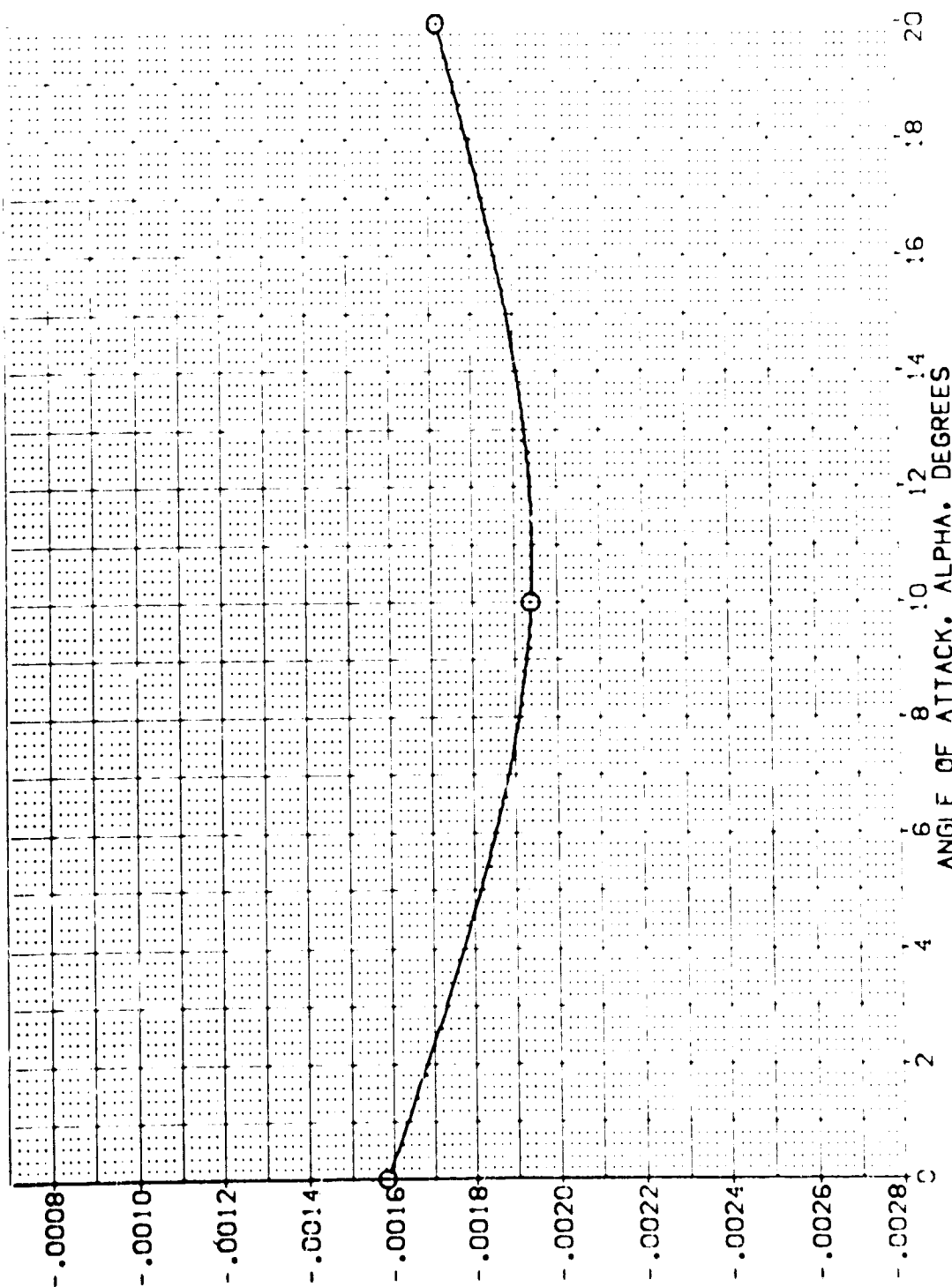


FIG. 14 LAT-DIR DERIVATIVES OF TOTAL VEHICLE-PART 1

SYMBOL  
O

MACH  
.587

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (AEJ025)

PARAMETRIC VALUES  
ELEVON .000 AILRON  
BOFLAP -11.700 SPOBRK  
RUDDER .000 ELEV-L  
ELEV-R .000

DATA SOURCE  
.000 DATASET ALPHA  
55.000 AEJ025 .000  
.000 AEJ027 20.000

REFERENCE INFORMATION  
SREF 2.4210 SQ.FT.  
LREF 14.2443 IN.  
BREF 28.1004 IN.  
XMRP 32.3010 IN.  
YMRP .0000 IN.  
ZMRP 11.2500 IN.  
SCALE .0300

SIDE FORCE COEFFICIENT DERIVATIVE WITH BETA, CYBETA, PER DEGREE

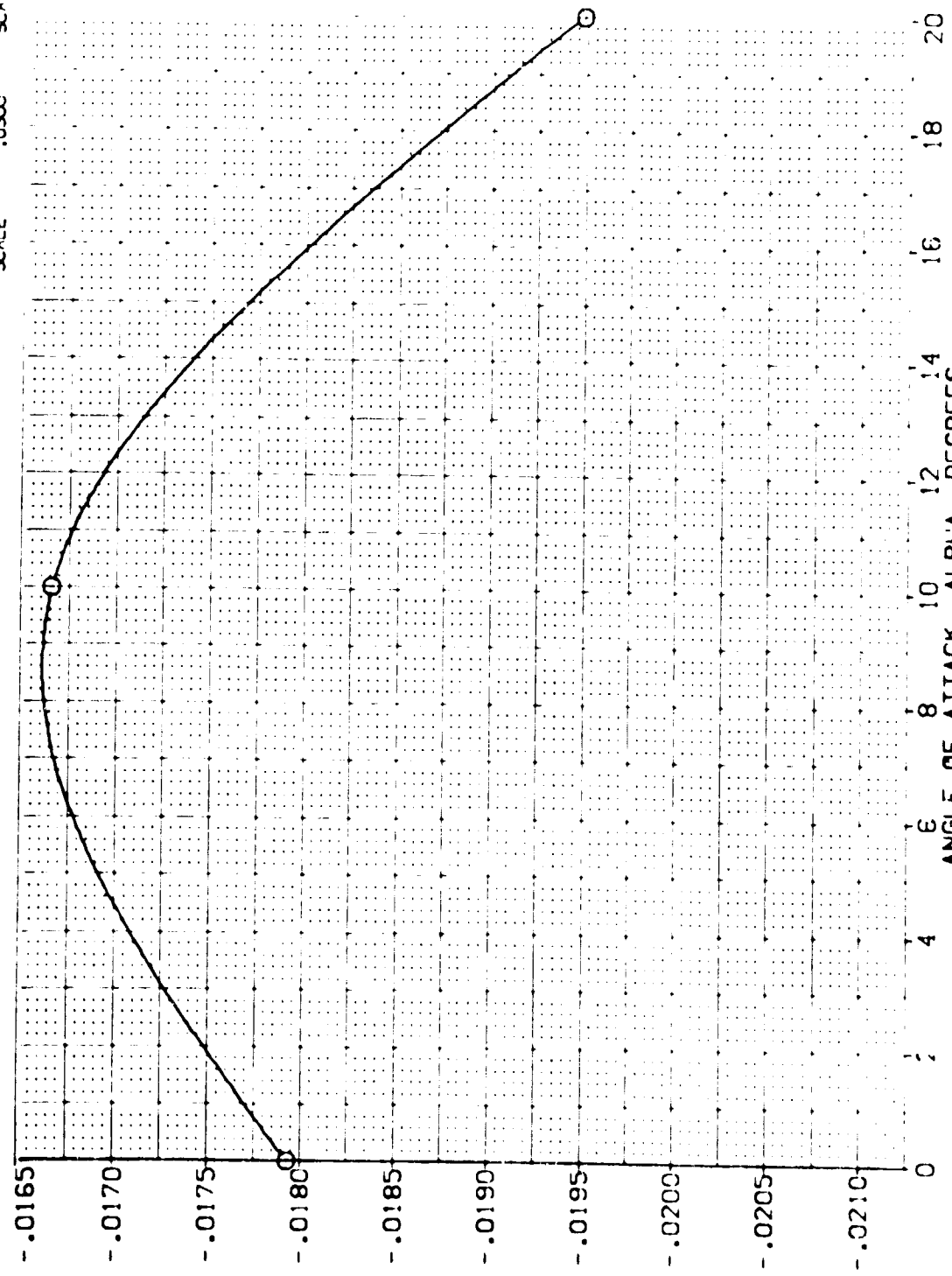


FIG. 15 LAT-DIR DERIVATIVES OF TOTAL VEHICLE-PART 2

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (AEJ025)

SYMBOL	MACH	PARAMETRIC VALUES				DATA SOURCE		REFERENCE INFORMATION			
0	.750	ELEVON	.000	AILRON	.000	DATASET	ALPHA	SREF	2.4210	SO.FT.	
		BOFLAP	-11.700	SPOBRK	55.000	AEJ025	10.000	UREF	14.2440	IN.	
		RUDDER	.000	ELEV-L	.000	AEJ027	20.000	BREF	28.1004	IN.	
		ELEV-R	.000					XPRP	32.3010	IN.	
								YPRP	.0000	IN.	
								ZPRP	11.2500	IN.	
								SCALE	.0300	SCALE	

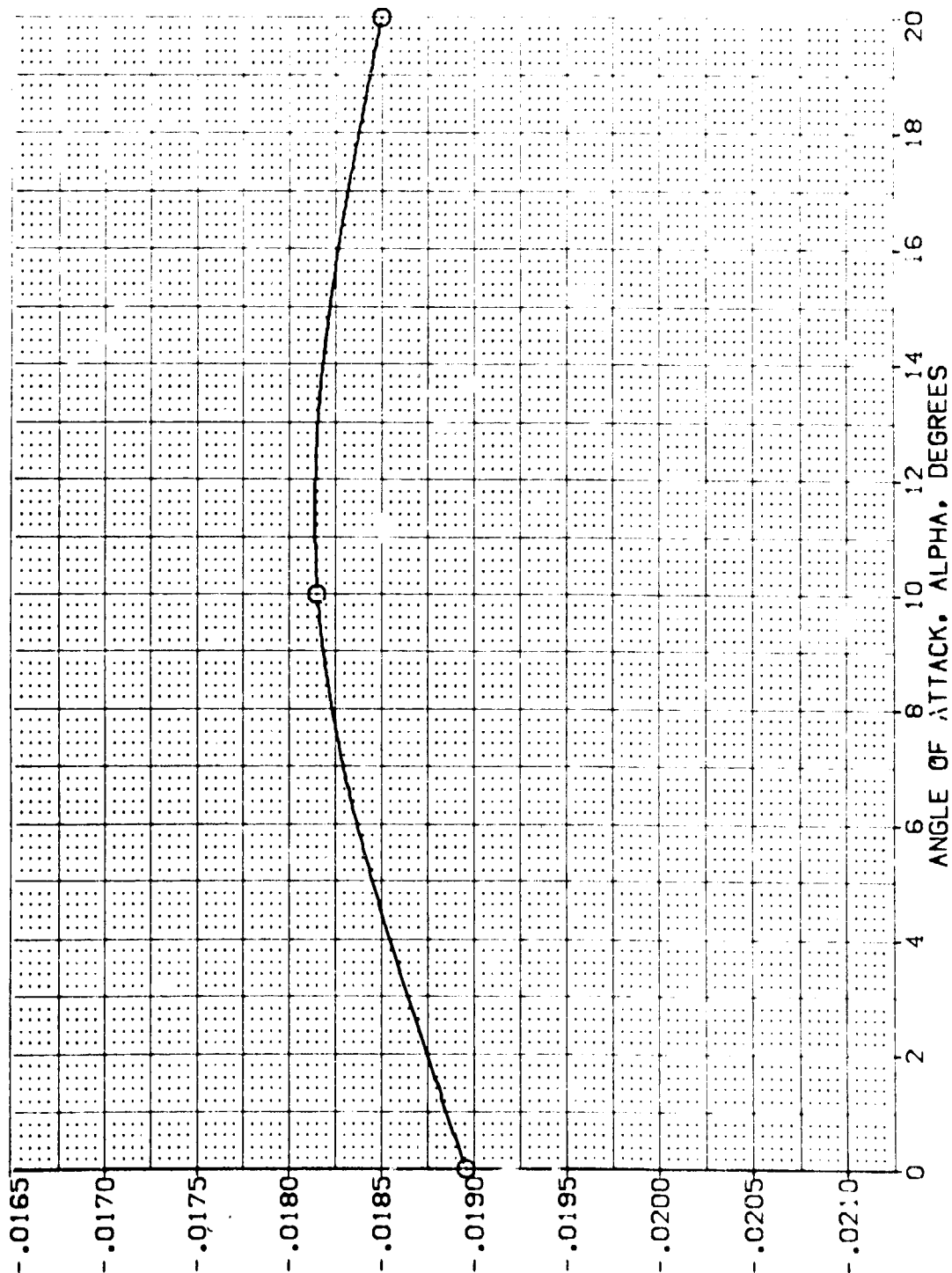
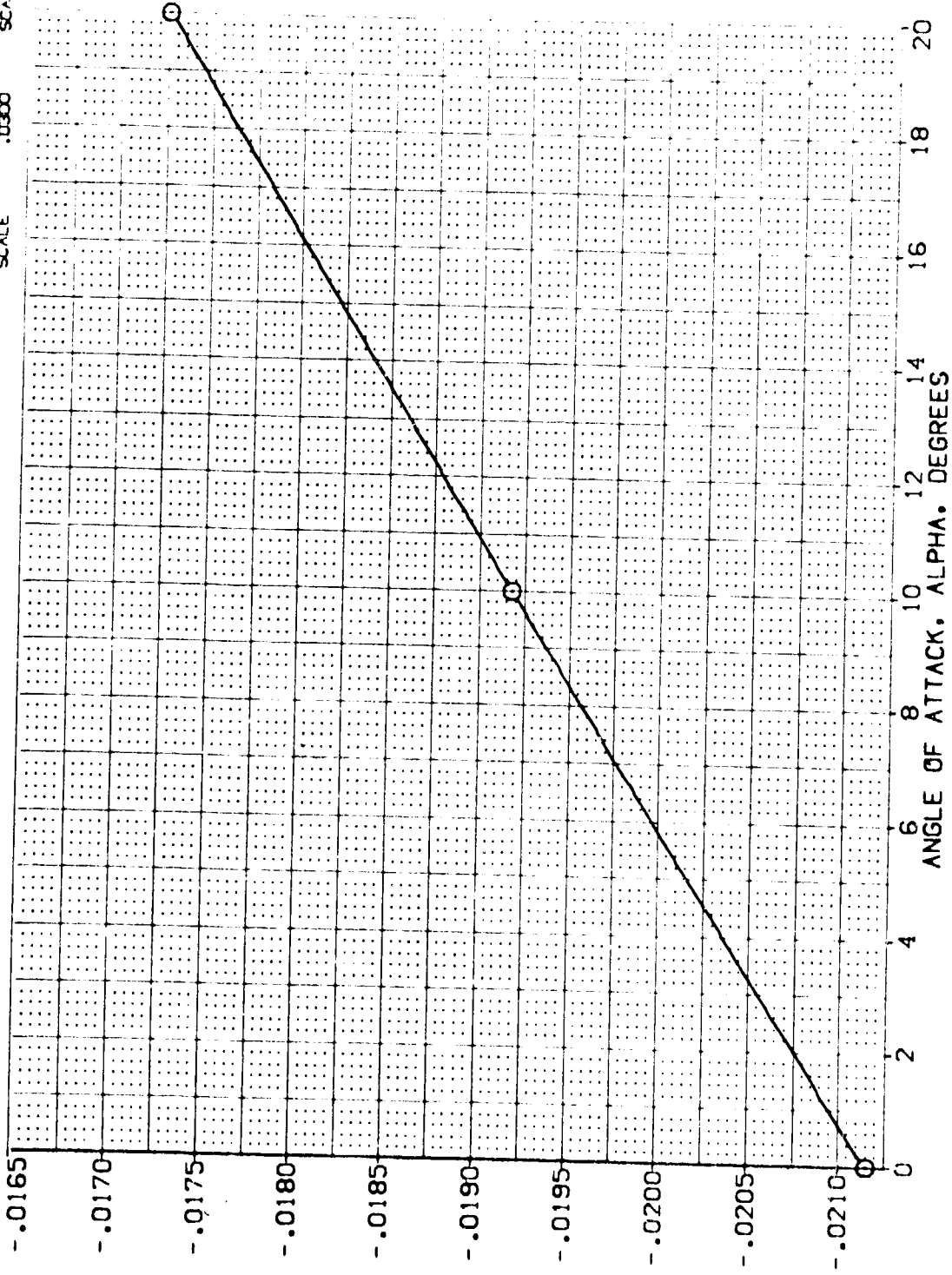


FIG. 15 LAT-DIR DERIVATIVES OF TOTAL VEHICLE-PART 2

ARC 11-747 0A53A B C M F W I V NOM. RN/L (AEJ025)

SYMBOL	WACH	PARAMETRIC VALUES	DATA SOURCE	REFERENCE INFORMATION
○	.903	ELEVON BOFLAP RUDDER ELEV-R	ALPHA AEJ025 AEJ027	SREF LREF BREF XMRP YMRP ZMRP SCALE
		.000 -11.700 .000 .000	.000 20.000	2.4210 14.2440 28.1004 32.9010 .0000 11.2500 .0300
				SO.FT. IN. IN. IN. IN. IN. IN.



SIDE FORCE COEFFICIENT DERIVATIVE WITH BETA, CYBETA, PER DEGREE

FIG. 15 LAT-DIR DERIVATIVES OF TOTAL VEHICLE-PART 2

ARC 11-747 GA53A B C M F W1 V NOM. RN/L (AEJ025)

SYMBOL	MACH	PARAMETRIC VALUES				DATA SOURCE				REFERENCE INFORMATION			
O	1.052	ELEVON	.000	AILERON	.000	DATASET	ALPHA	SREF	LREF	2.4210	50. FT.		
		BOFLAP	-11.700	SPDRK	56.000	AEJ025	.000	BREF	14.2440	IN.			
		RUDDER	.000	ELEV-L	.000	AEJ027	20.000	XMRP	28.1004	IN.			
		ELEV-R	.000					YMRP	32.3010	IN.			
								ZMRP	11.2500	IN.			
								SCALE	.0300	SCALE			

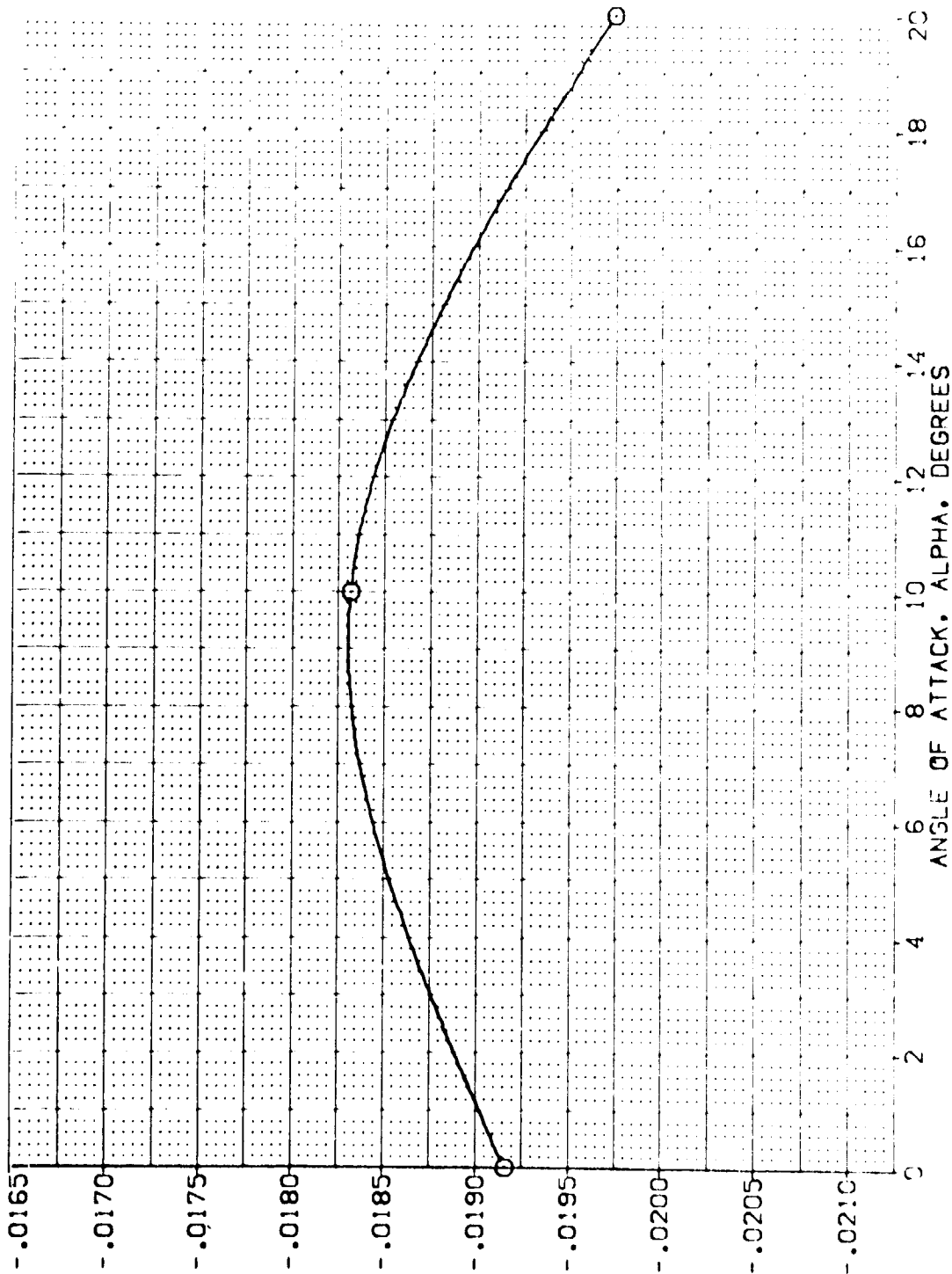


FIG. 15 LAT-DIR DERIVATIVES OF TOTAL VEHICLE-PART 2



SYMBOL  
O

MACH  
1.201

ELEVON  
BOFLAP  
RUDDER  
ELEV-R

PARAMETRIC VALUES  
.000  
-11.700  
.000  
.000

AIRLON  
SPOBRK  
ELEV-L

.000  
55.000  
.000

DATASET  
AEJ025  
AEJ027

DATA SOURCE  
ALPHA  
20.000

DATASET  
AEJ026

ALPHA  
10.000

SREF  
LREF  
BREF  
XMRP  
YMRP  
ZMRP  
SCALE

2.4210  
14.2440  
28.1004  
32.3010  
.0000  
11.2500  
.0300

REFERENCE INFORMATION  
50.FT.  
IN.  
IN.  
IN.  
IN.  
IN.  
SCALE

SIDE FORCE COEFFICIENT DERIVATIVE WITH BETA, CYBETA, PER DEGREE

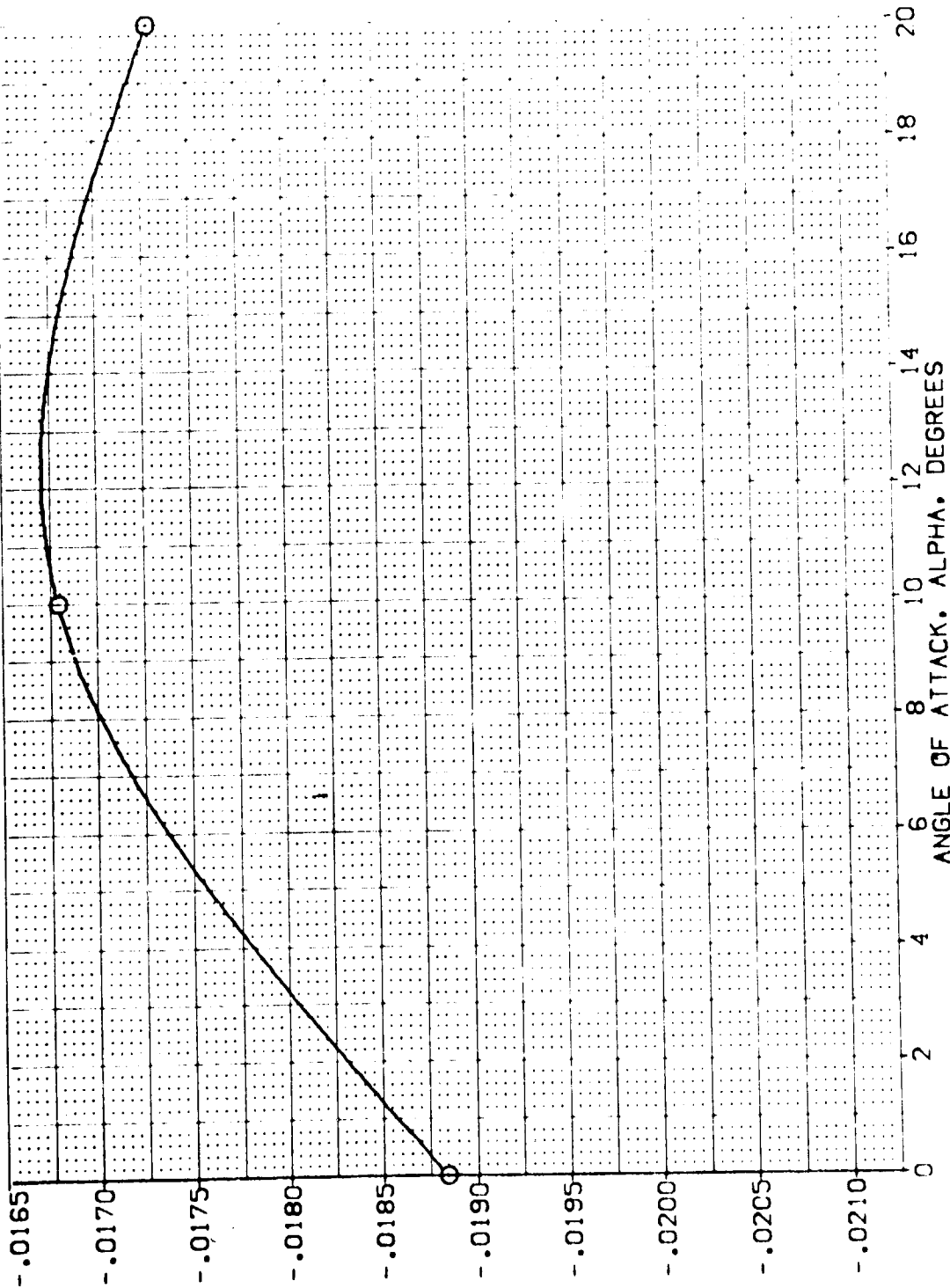


FIG. 15 LAT-DIR DERIVATIVES OF TOTAL VEHICLE-PART 2

SYMBOL  
O

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (AEJ025)

PARAMETRIC VALUES		DATA SOURCE		REFERENCE INFORMATION	
ELEVON	.000	ALLRON	.000	ALPHA	SREF
BOFLAP	-11.700	SPOBRK	55.000	AEJ025	LREF
RUDDER	.000	ELEV-L	.000	AEJ027	BREF
ELEV-R	.000				XREF
					YREF
					ZREF
					SCALE
					2.4210
					14.2440
					28.1004
					32.3010
					11.0000
					11.2300
					IN.
					IN.
					IN.
					SCALE

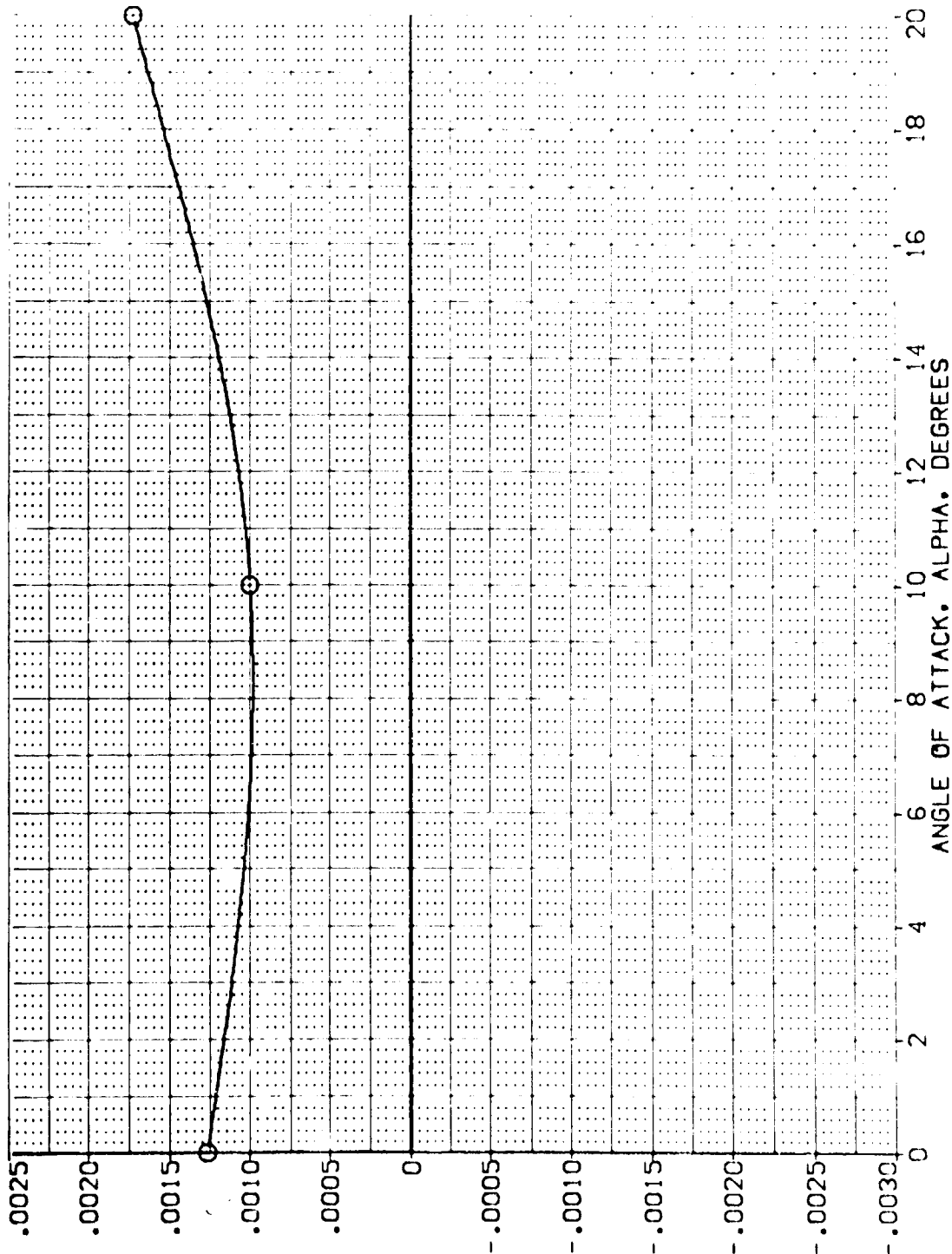


FIG. 15 LAT-DIR DERIVATIVES OF TOTAL VEHICLE-PART 2

YAWING MOMENT COEFFICIENT DERIVATIVE WITH BETA, CYNBET, PER DEGREE



ARC 11-747 0A53A B C M F W1 V NOM. RN/L (AEJ025)

SYMBOL	WACH	PARAMETRIC VALUES				DATA SOURCE				REFERENCE INFORMATION			
○	.798	ELEVON	.000	AILRON	.000	DATASET	ALPHA	SREF	2.4210	SO.FT.	IN.		
		BOFLAP	-11.700	SPOBRK	55.000	AEJ025	10.000	LRP	14.2440	IN.			
		RUDER	.000	ELEV-L	.000	AEJ027	20.000	BRP	28.1004	IN.			
		ELEV-R	.000					YMRP	32.3010	IN.			
								ZMRP	.0000	IN.			
								SCALE	11.2500	IN.			
									.0300	SCALE			

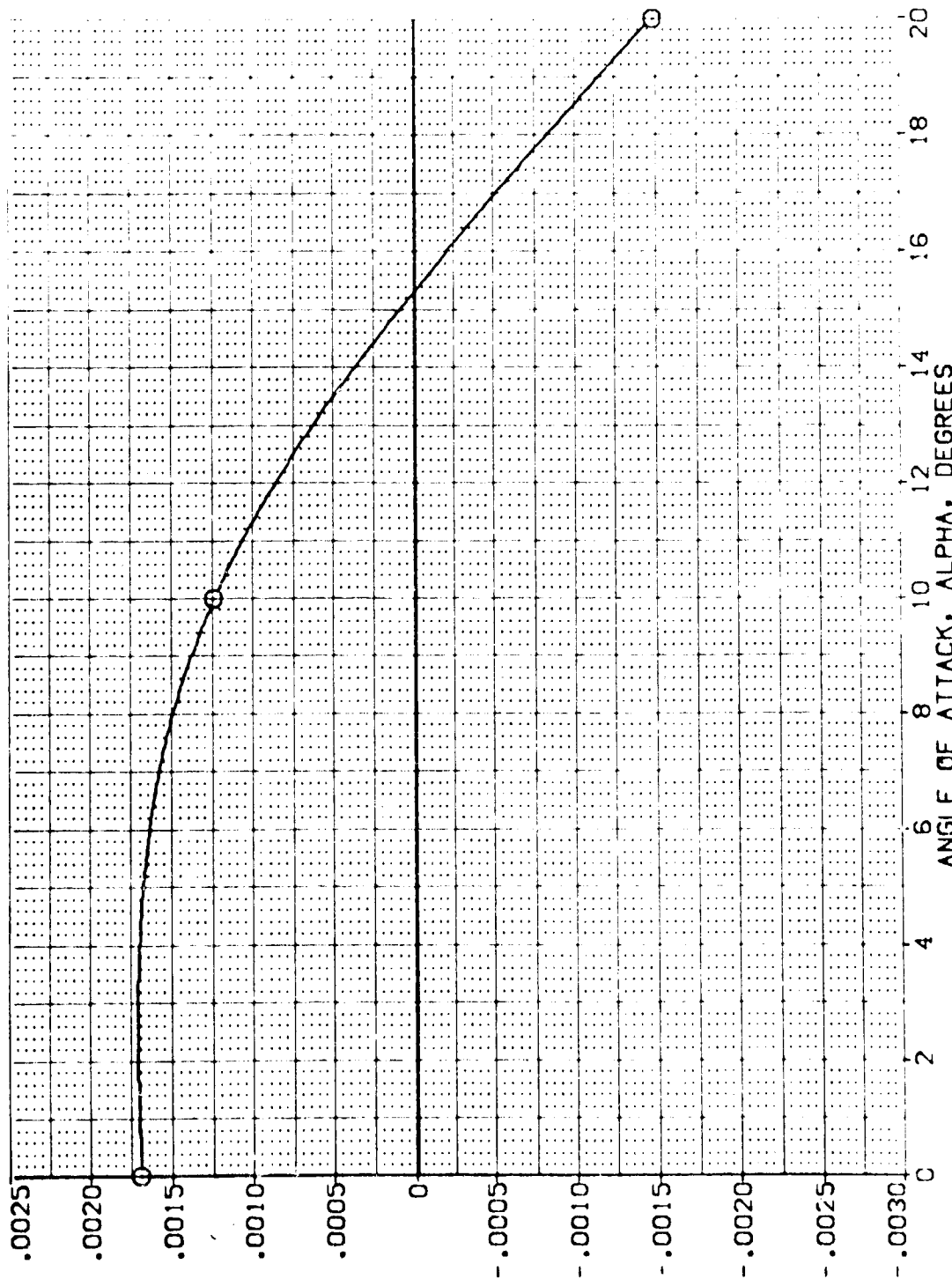


FIG. 15 LAT-DIR DERIVATIVES OF TOTAL VEHICLE-PART 2



## Symbols

**HOW**

## PARAMETERS

VALUES

□

**SOURCE**

## REFERENCES

# NEOGRAMA

ATION

## REFERENCE

**QURCE**

53

## PARAMET

**Symbol**

2

YAWING MOMENT COEFFICIENT DERIVATIVE WITH BETA, CYNBET, PER DEGREE

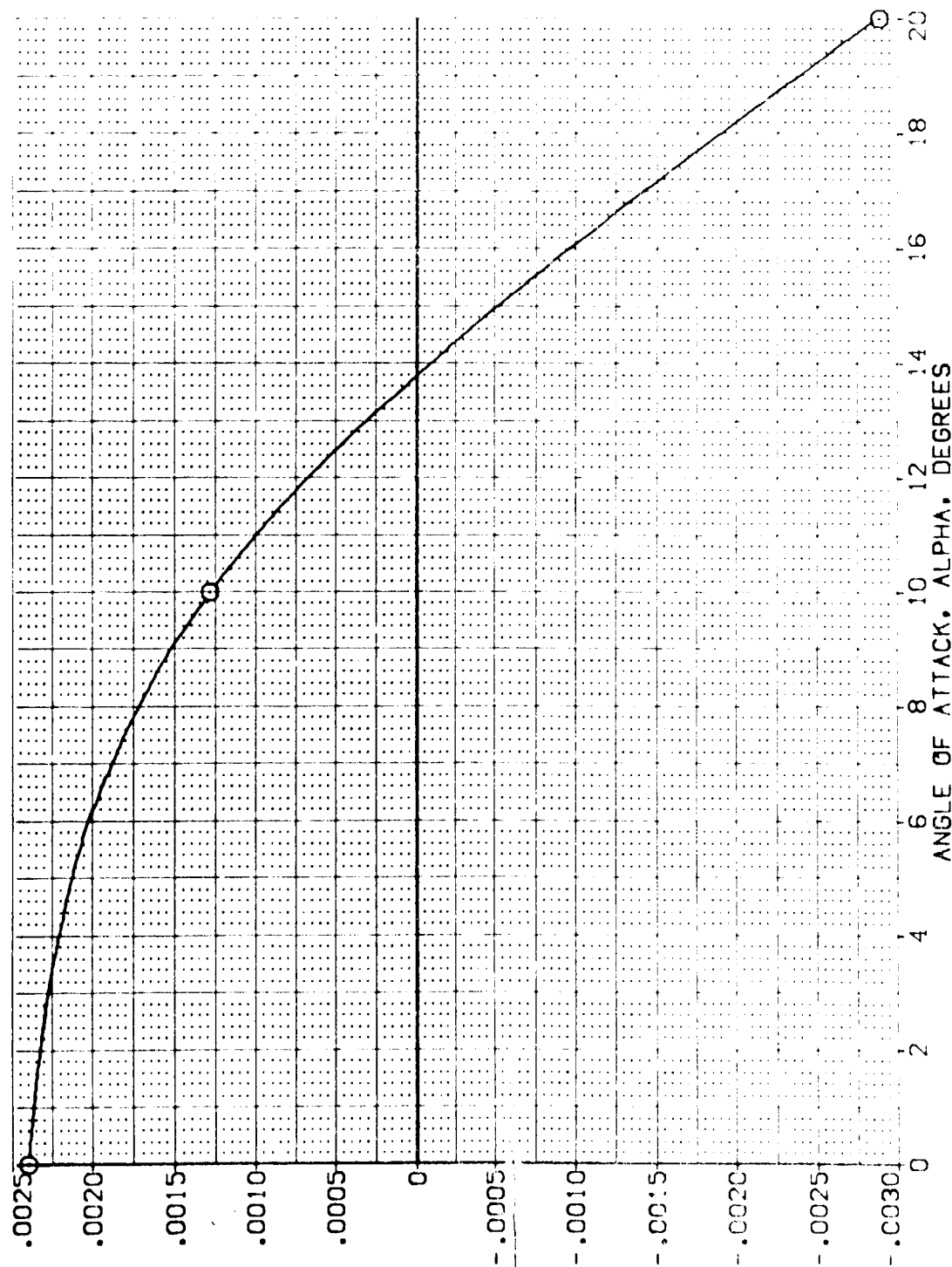
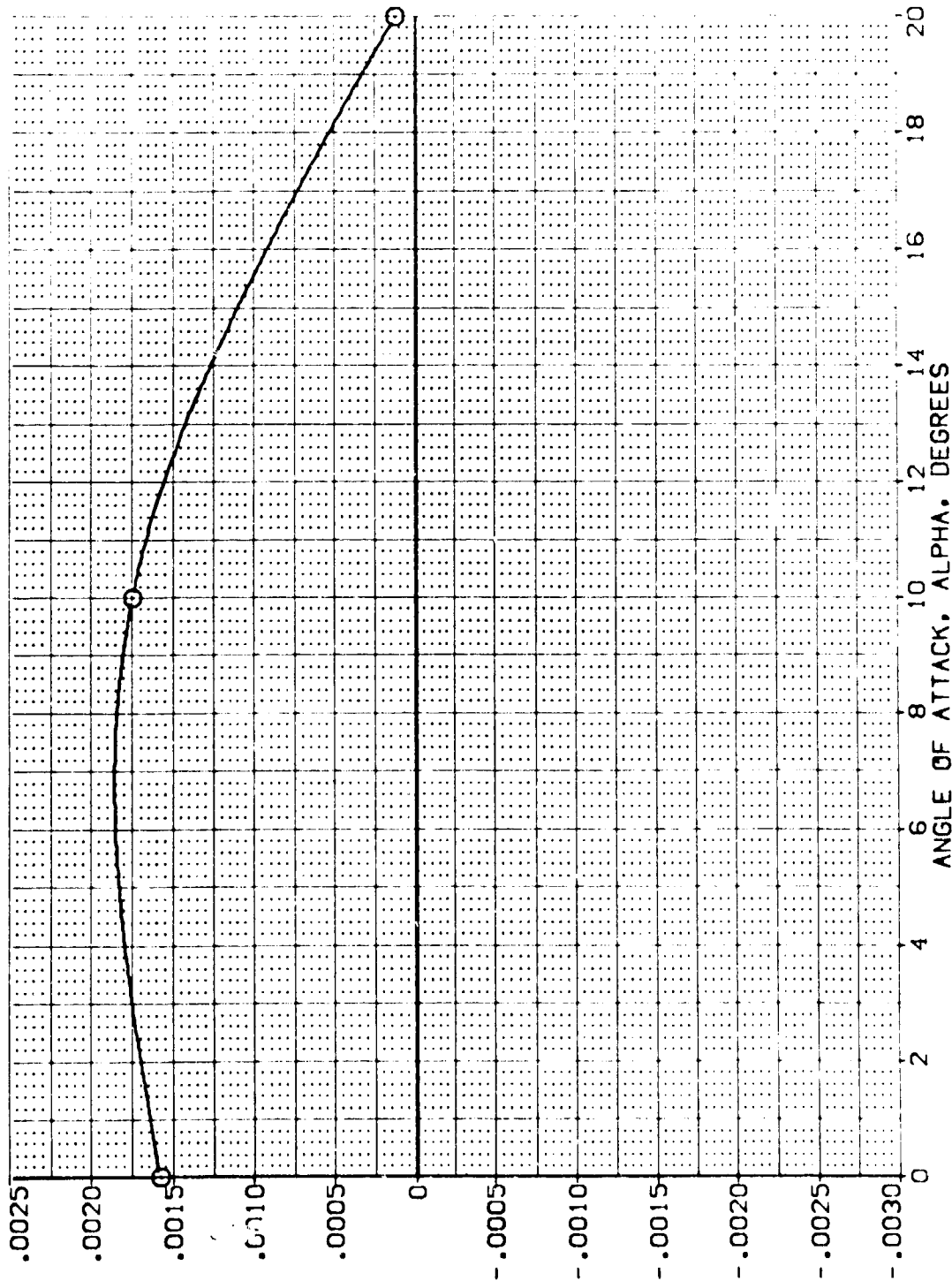


FIG. 15 LAT-DIR DERIVATIVES OF TOTAL VEHICLE-PART 2

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (AEJ025)

SYMBOL	MACH	PARAMETRIC VALUES	DATA SOURCE	REFERENCE INFORMATION
0	1.052	ELEVON .000 AILRON .000	ALPHA	SREF 2.4210 SQ.FT.
		BOFLAP -11.700 SPDBRY. 55.000 AEJ025	ALPHA 10.000	REF 14.2440 IN.
		RUDDER .000 ELEV-L .000 AEJ027	AEJ026	BREF 28.1004 IN.
		ELEV-R .000	20.000	XMRP 32.3010 IN.
				YMRP 11.0000 IN.
				ZMRP 11.2500 IN.
				SCALE .0300



YAWING MOMENT COEFFICIENT DERIVATIVE WITH BETA, CYNBET, PER DEGREE

FIG. 15 LAT-DIR DERIVATIVES OF TOTAL VEHICLE-PART 2

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (AEJ025)

SYMBOL	MACH	PARAMETRIC VALUES				DATA SOURCE		REFERENCE INFORMATION			
0	1.201	ELEVON	.000	AILRON	.000	AEJ025	ALPHA	10.000	SREF	2.4210	SQ.FT.
		BDFLAP	-11.700	SPOBRK	.000	AEJ025			LRREF	14.2440	
		RUDDER	.000	ELEV-L	.000	AEJ027			BRREF	28.1004	
		ELEV-R	.000						YREF	32.3010	
									ZREF	11.2300	
									SCALE	.0300	

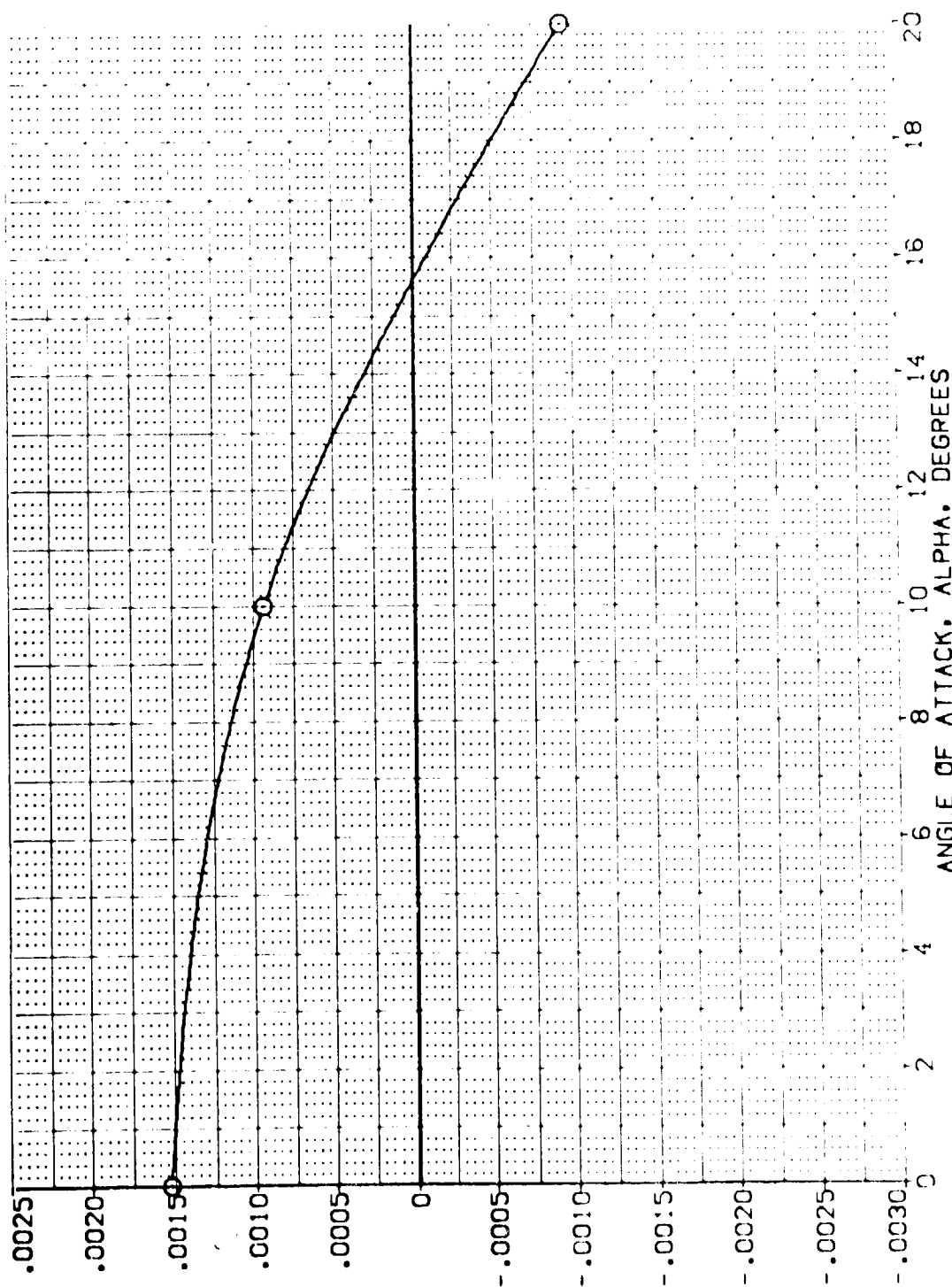


FIG. 15 LAT-DIR DERIVATIVES OF TOTAL VEHICLE-PART 2

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (AEJ025)

SYMBOL	MACH	PARAMETRIC VALUES	DATA SOURCE	REFERENCE INFORMATION
0	.587	ELEVON .000 AILRON .000	ALPHA 10.000	SREF 2.4210 SQ.FT.
		BDFLAP -11.700 SPOBRK .000	AEJ025 20.000	LREF 14.2440 IN.
		RUDDER .000 ELEV-L .000	AEJ027 .000	BREF 28.1004 IN.
		ELEV-R .000		XMRP 32.3010 IN.
				YMRP .0000 IN.
				ZMRP 11.2500 IN.
				SCALE .0300

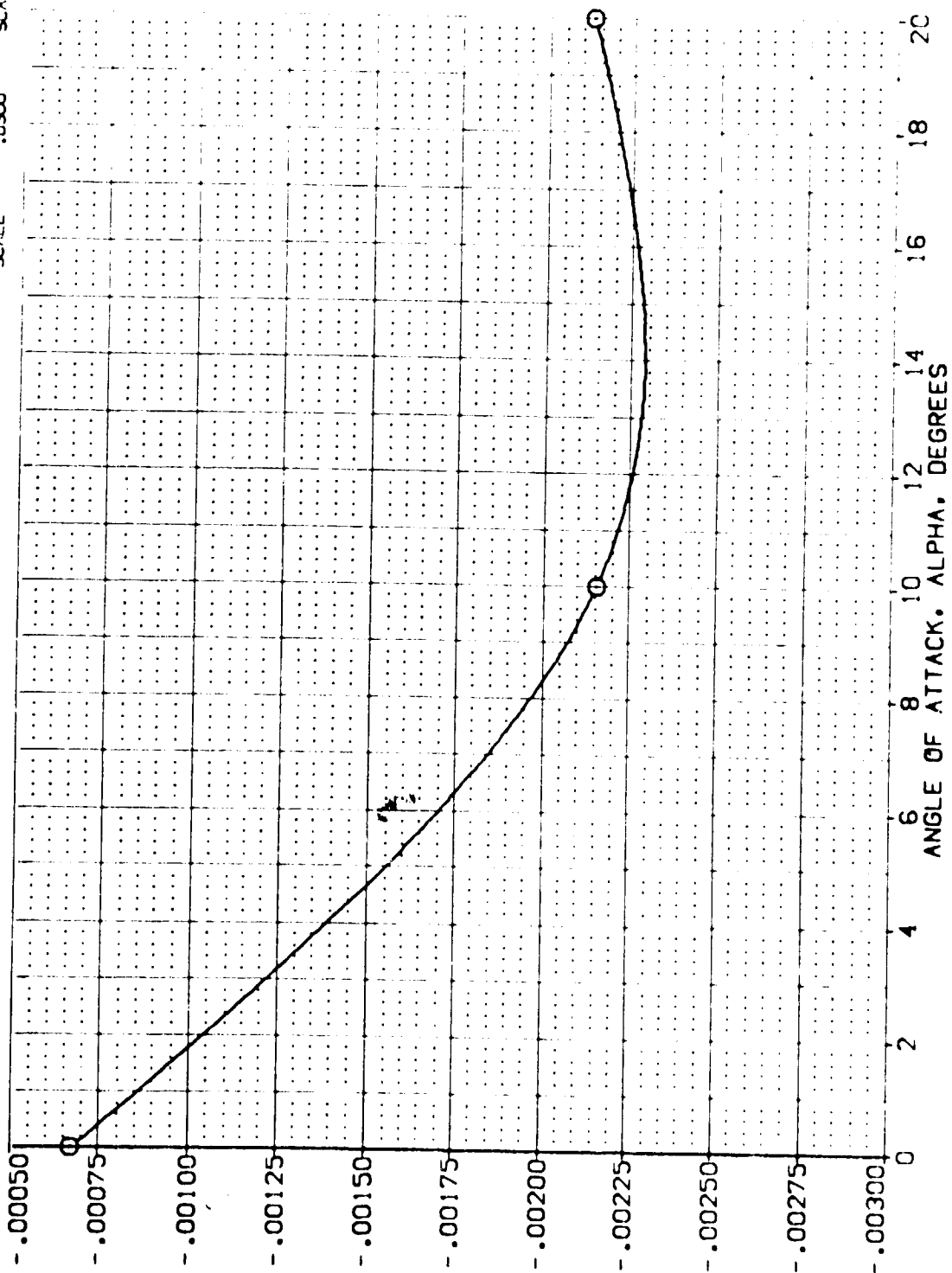


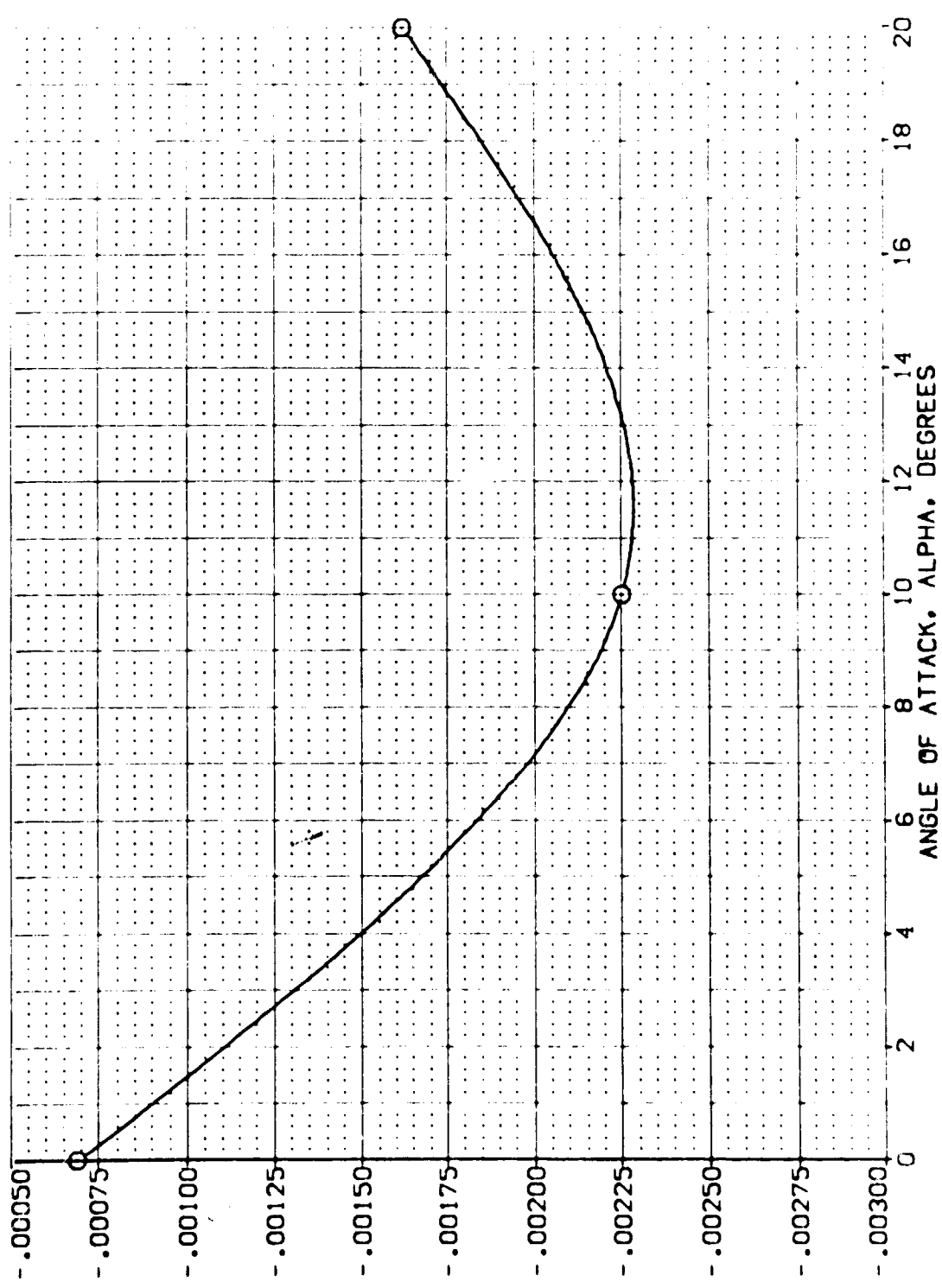
FIG. 15 LAT-DIR DERIVATIVES OF TOTAL VEHICLE-PART 2

ROLLING MOMENT COEFFICIENT DERIVATIVE WITH BETA, CBLBET, PER DEGREE



ARC 11-747 0A53A B C M F W1 V NOM. RN/L (AEJ025)

PARAMETRIC VALUES			DATA SOURCE		REFERENCE INFORMATION	
SYMBOL	MACH	ELEVON	.000	ALPHA	SREF	SQ.FT.
0	.503	BDFLAP	-11.700	.000	LREF	IN.
		RUDDER	.000	20.000	BREF	IN.
		ELEV-R	.000		XMRP	IN.
					YMRP	IN.
					ZMRP	IN.
					SCALE	SCALE



ROLLING MOMENT COEFFICIENT DERIVATIVE WITH BETA, CBLBET, PER DEGREE

FIG. 15 LAT-DIR DERIVATIVES OF TOTAL VEHICLE-PART 2

ARC 11-747 0A53A B C M F W I V NOM. RN/L (AEJ025)

**Syned**      **H<sub>2</sub>O<sub>2</sub>**  
**O**            **1.052**

ELEVON  
BOFLAP  
RUDDER  
ELEV-R

PARAMETRIC VALUES	
AIRLON	.000
SPDRX	-11.700
ELEV-L	.000
	.000

DATA SET	ALPHA
.000	AEJ025
56.000	AEJ025
.000	AEJ027
20.000	AEJ027

DATA SOURCE

Dataset	Alpha
1	0.000
2	0.000
3	0.000
4	0.000
5	0.000
6	0.000
7	0.000
8	0.000
9	0.000
10	0.000
11	0.000
12	0.000
13	0.000
14	0.000
15	0.000
16	0.000
17	0.000
18	0.000
19	0.000
20	0.000
21	0.000
22	0.000
23	0.000
24	0.000
25	0.000
26	0.000
27	0.000
28	0.000
29	0.000
30	0.000
31	0.000
32	0.000
33	0.000
34	0.000
35	0.000
36	0.000
37	0.000
38	0.000
39	0.000
40	0.000
41	0.000
42	0.000
43	0.000
44	0.000
45	0.000
46	0.000
47	0.000
48	0.000
49	0.000
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62	0.000
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67	0.000
68	0.000
69	0.000
70	0.000
71	0.000
72	0.000
73	0.000
74	0.000
75	0.000
76	0.000
77	0.000
78	0.000
79	0.000
80	0.000
81	0.000
82	0.000
83	0.000
84	0.000
85	0.000
86	0.000
87	0.000
88	0.000
89	0.000
90	0.000
91	0.000
92	0.000
93	0.000
94	0.000
95	0.000
96	0.000
97	0.000
98	0.000
99	0.000
100	0.000

REF  
LREF  
BREF  
XMRP  
YMRP  
ZMRP  
SCALE

REFERENCE INFORMATION

2.4210	SC. FT.
14.2440	IN.
29.1004	IN.
32.3010	IN.
0.0000	IN.
11.2500	IN.
.0300	SCALE

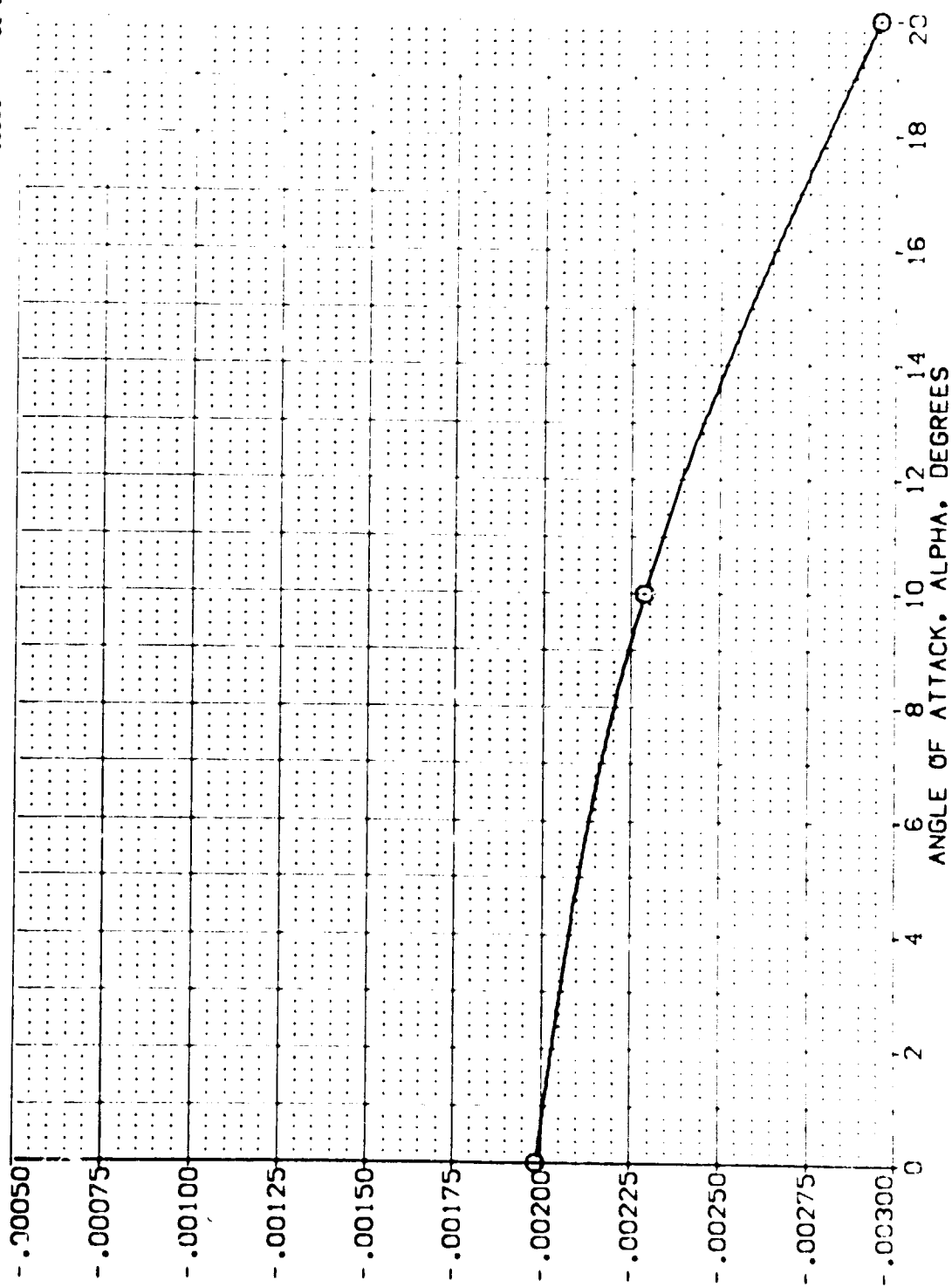


FIG. 15 LAT-DIR DERIVATIVES OF TOTAL VEHICLE-PART 2

ARC 11-747 0A53A B C M F W I V NOM. RN/L (AEJ025)

SYMBOL	WACH	PARAMETRIC VALUES	DATA SOURCE	REFERENCE INFORMATION
0	1.201	ELEVON .000 AILRON .000	ALPHA	SREF 2.4210 SQ.FT.
		BOFLAP -11.700 SPOBRK 55.000	AEJ025	UREF 14.2410 N.
		RUDDER .000 ELEV-L .000	AEJ027	BREF 28.1004 N.
		ELEV-R .000	20.000	XMRP 32.3010 N.
				YMRP .0000 N.
				ZMRP 11.2500 N.
				SCALE .0300 SCALE

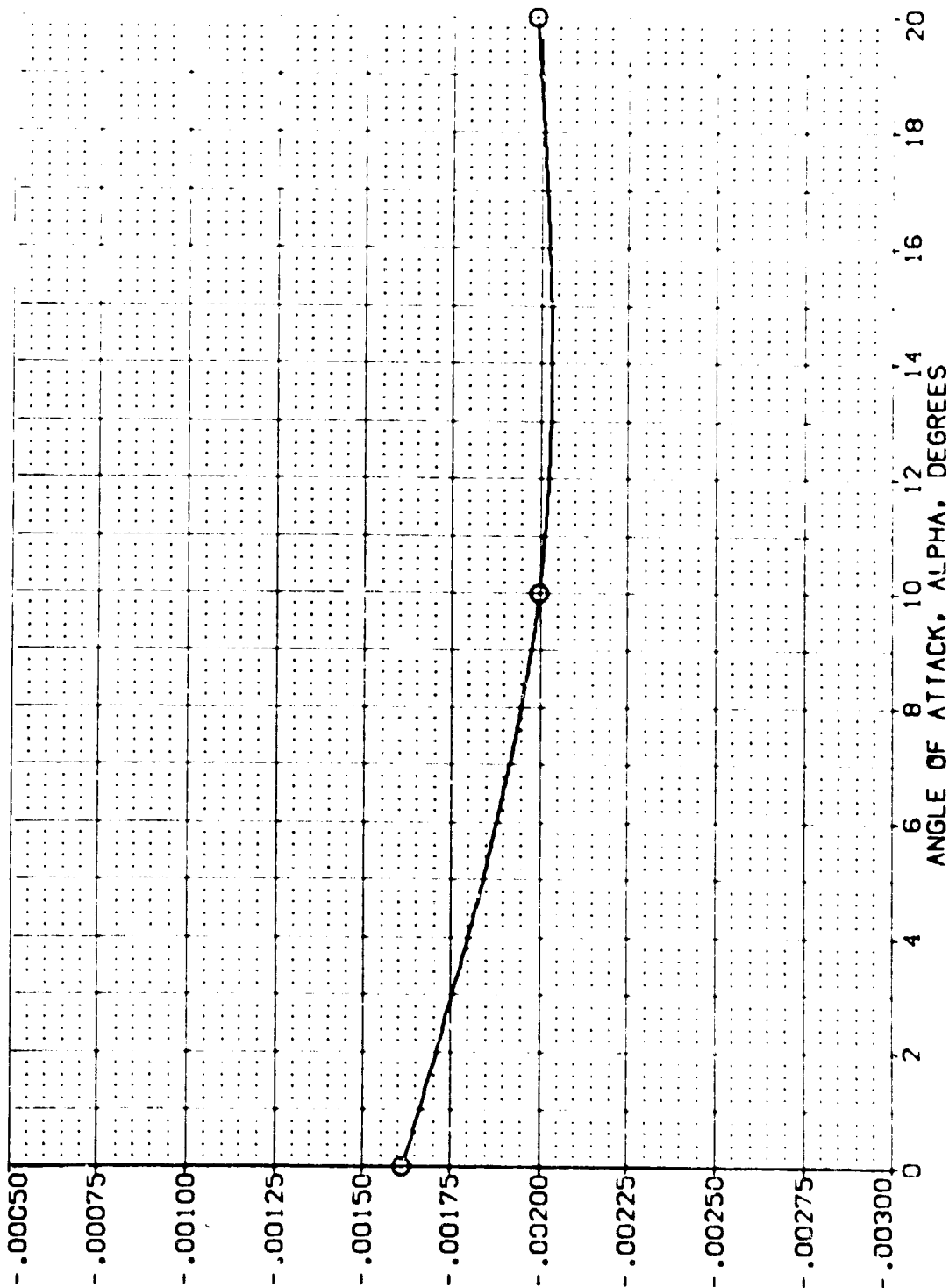


FIG. 15 LAT-DIR DERIVATIVES OF TOTAL VEHICLE-PART 2



ARC 11-747 0A53A B C M F W1 V NOM. RN/L (AEJ039)

SYMBOL  
O

MACH  
.569

ELEVON  
BOFLAP  
RUDDER  
ELEV-R

PARAMETRIC VALUES  
.000 AILRON  
-11.700 SPOBRK  
.000 ELEV-L  
.000

.000 DATASET  
85.000 AEJ039  
.000 AEJ041

DATA SOURCE  
ALPHA  
20.000

DATASET  
AEJ040  
10.000

ALPHA  
10.000  
SREF  
LREF  
BREF  
XMRP  
YMRP  
ZMRP  
SCALE

REFERENCE INFORMATION  
2.4210 30.FT.  
14.2440 IN.  
28.1004 IN.  
32.3018 IN.  
.0000 IN.  
11.2500 IN.  
.0300 SCALE

SIDE FORCE COEFFICIENT DERIVATIVE WITH BETA, CYBETA, PER DEGREE

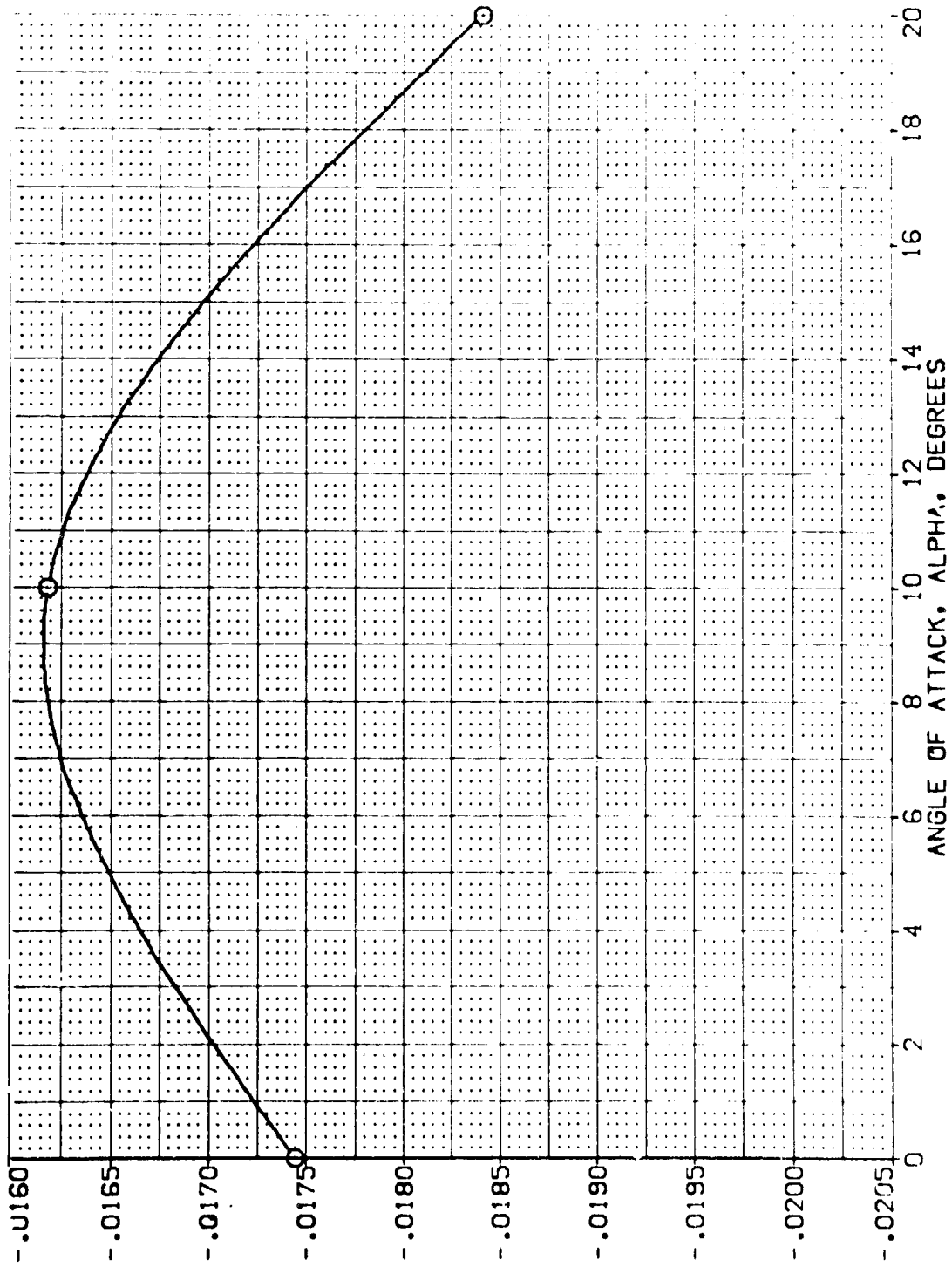


FIG. 16 LAT-DIR DERIVATIVES OF TOTAL VEHICLE-PART 3

ARC 11-747 0A53A B C M F W1 V NGM. RN/L (AEJ039)

SYMBOL	MACH	PARAMETRIC VALUES				DATA SOURCE		REFERENCE INFORMATION			
○	.800	ELEVON	.000	AILERON	.000	AEJ039	SREF	2.4210	SQ.FT.		
		BOFLAP	-11.700	SPOBRK	65.000	AEJ041	LREF	14.2440	N.		
		RUDDER	.000	ELEV-L	.000		BREF	28.1004	N.		
		ELEV-R	.000				XPRP	32.3010	N.		
							YPRP	.0000	N.		
							ZPRP	11.2500	N.		
							SCALE	.0300	SCALE		

SIDE FORCE COEFFICIENT DERIVATIVE WITH BETA, CYBETA, PER DEGREE

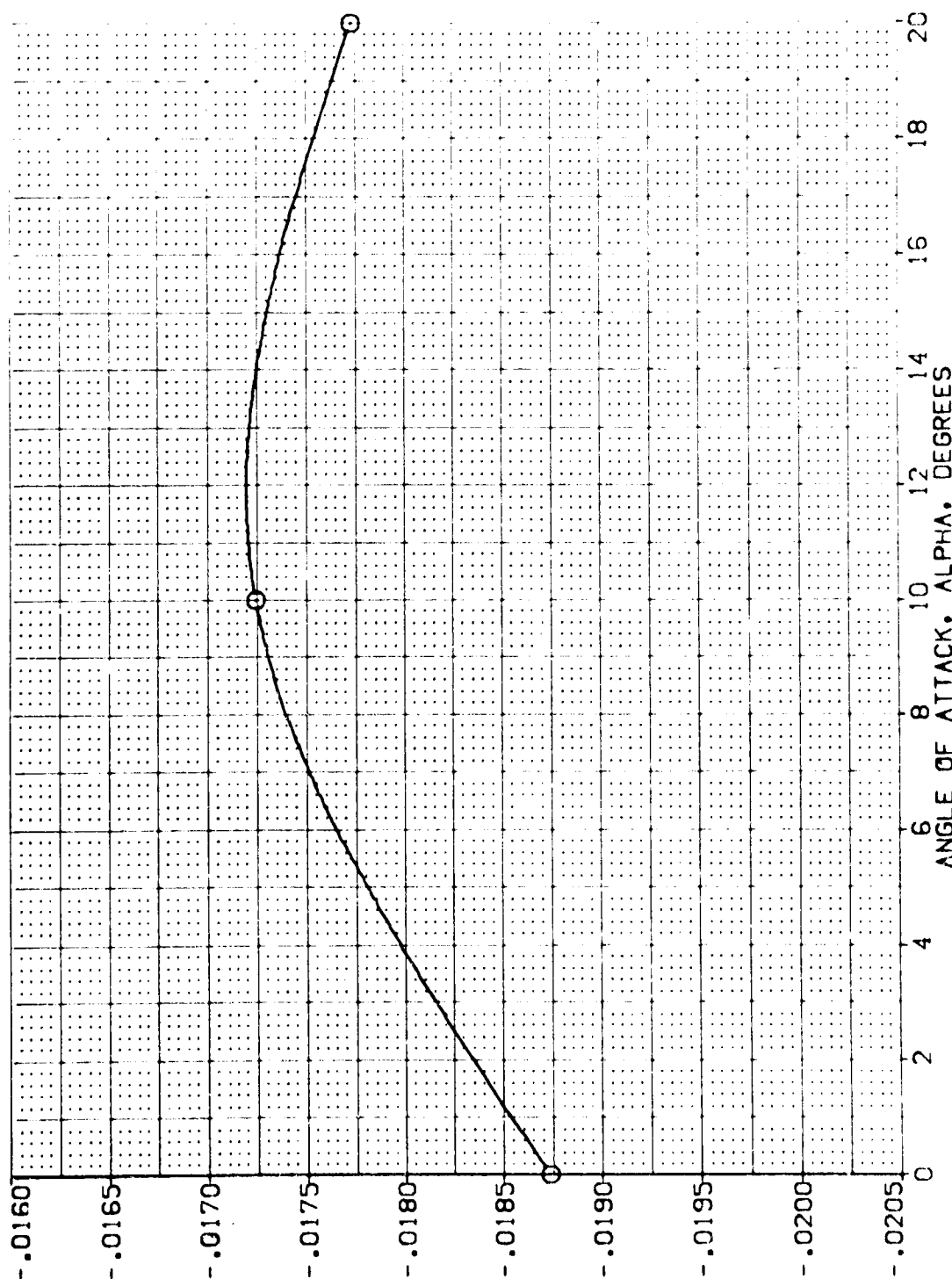


FIG. 1C LAT-DIR DERIVATIVES OF TOTAL VEHICLE-PART 3

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (AEJ039)

SYMBOL	MACH	PARAMETRIC VALUES			DATA SOURCE			REFERENCE INFORMATION		
○	.900	ELEVON	.000	AILRON	.000	DATASET	ALPHA	SREF	2.4210	SC.FT.
		BOFLAP	-11.700	SPOBRK	85.000	AEJ039	10.000	LREF	14.2440	IN.
		RUDDER	.000	ELEV-L	.000	AEJ041	20.000	BREF	28.1004	IN.
		ELEV-R	.000					XMRP	32.3010	IN.
								YMRP	.0000	IN.
								ZMRP	11.2500	IN.
								SCALE	.0300	SCALE

SIDE FORCE COEFFICIENT DERIVATIVE WITH BETA, CYBETA, PER DEGREE

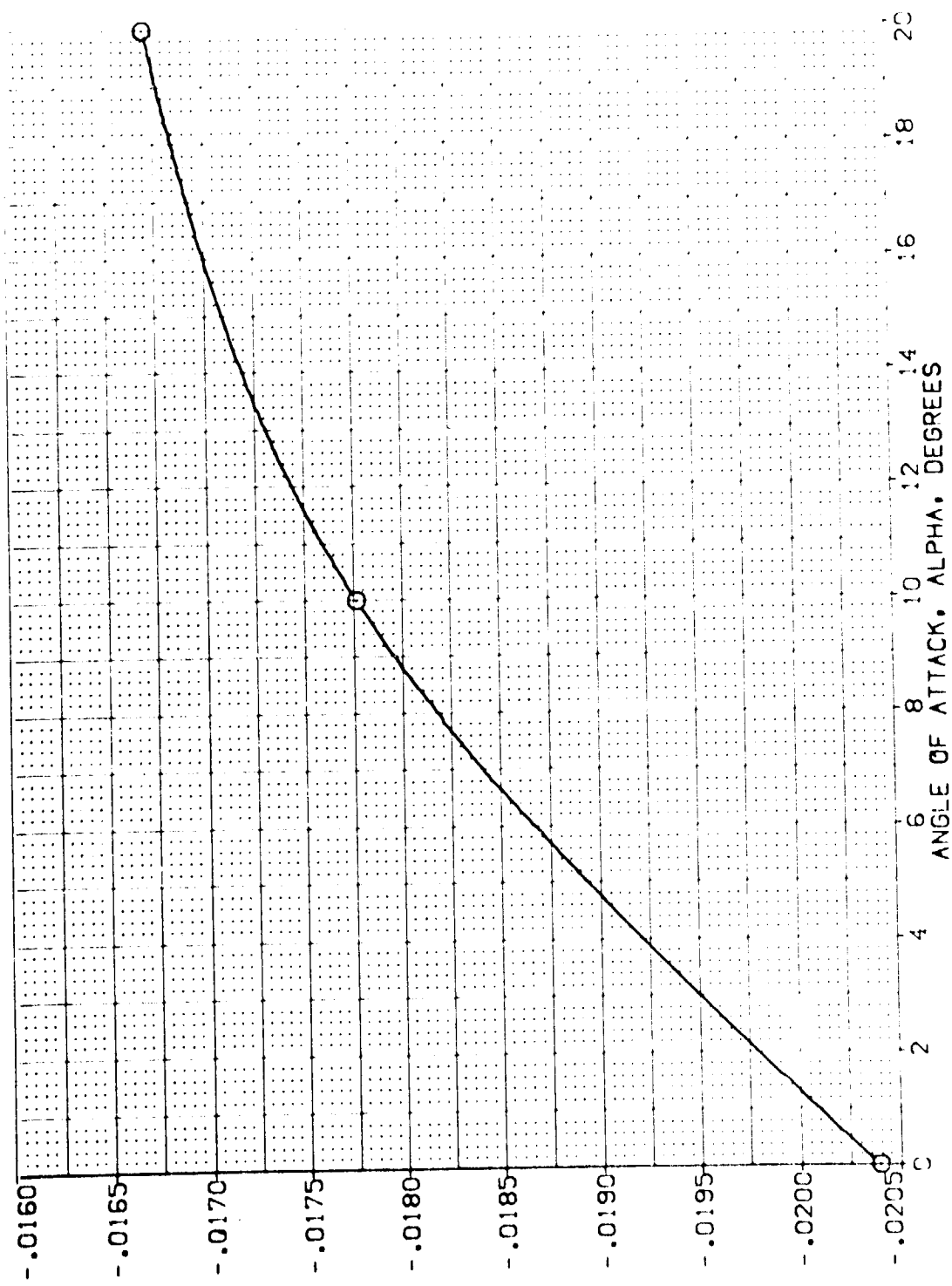


FIG. 16 LAT-DIR DERIVATIVES OF TOTAL VEHICLE-PART 3

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (AEJ039)

SYMBOL	MACH	PARAMETRIC VALUES				DATA SOURCE				REFERENCE INFORMATION			
O	1.052	ELEVON	.000	AILRON	.000	DATASET	ALPHA	ALPHA	SREF	2.4210	SO.FT.		
		BOFLAP	-11.700	SPOBRK	85.000	AEJ039	.000	AEJ040	LREF	14.2140	N.		
		RUDDER	.000	ELEV-L	.000	AEJ041	20.000		BREF	28.1004	N.		
		ELEV-R	.000						YMRP	32.3010	N.		
									ZMRP	.0000	N.		
									SCALE	11.2500	SCALE		

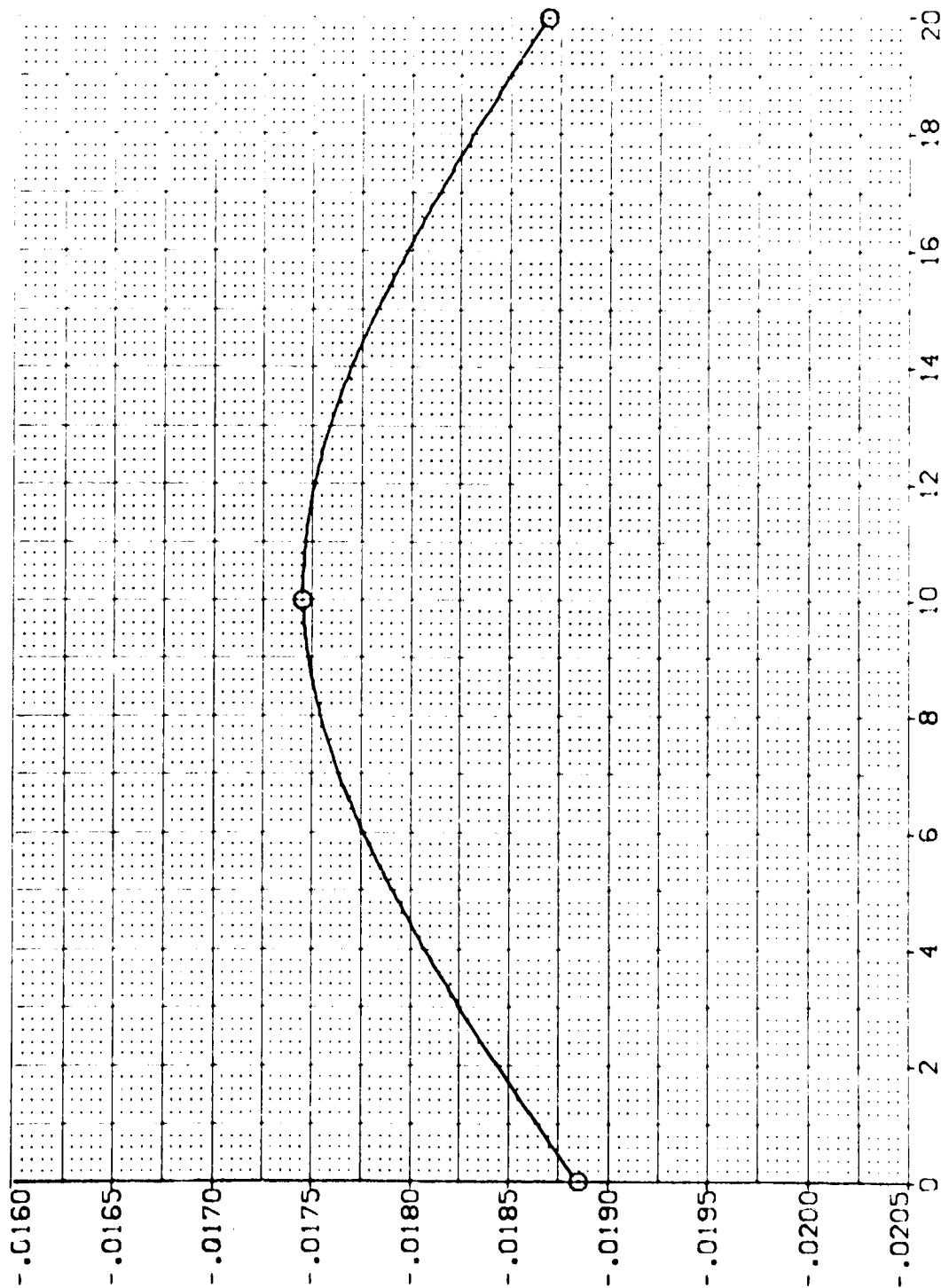


FIG. 16 LAT-DIR DERIVATIVES OF TOTAL VEHICLE-PART 3

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (AEJ039)

SYMBOL	MACH	PARAMETRIC VALUES				DATA SOURCE		REFERENCE INFORMATION								
		ELEVON	AILRON	SPDRK	ELEV-L	ALPHA	ALPHA	SREF	LREF	BREF	YMRP	ZMRP	SCALE			
		1.201	.000	-11.700	.000	.000	AEJ039	AEJ040	10.000	2.4210	14.2440	28.1004	32.3010	.0000	11.2500	.0300
		BOFLAP	RJDDER	ELEV-R												

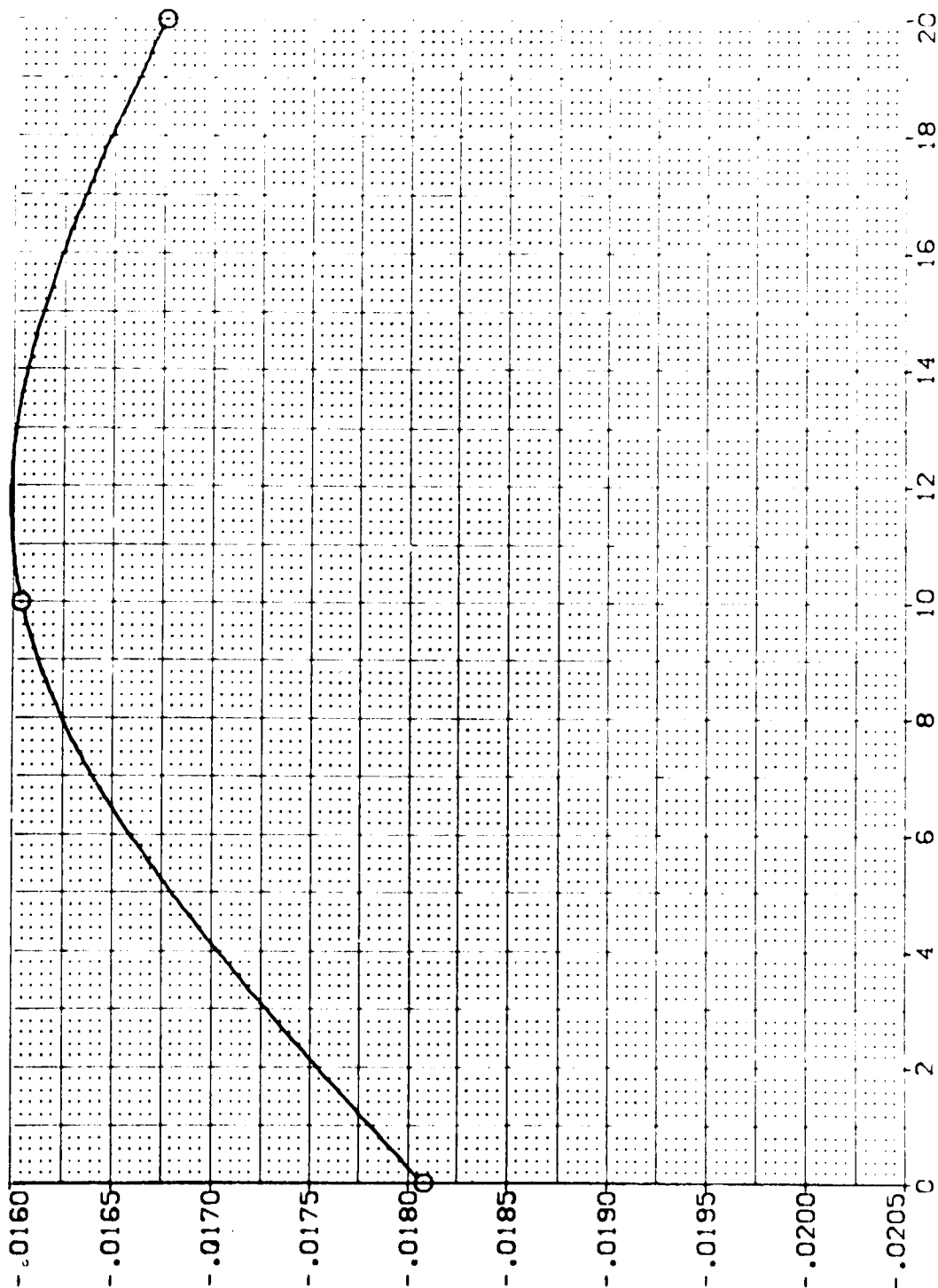


FIG. 16 LAT-DIR DERIVATIVES OF TOTAL VEHICLE-PART 3

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (AEJ039)

SYMBOL	MACH	PARAMETRIC VALUES				DATA SOURCE		REFERENCE INFORMATION			
○	.588	ELEVON	.000	AILRON	.000	DATASET	ALPHA	SREF	2.4210	SO.FT.	
		BOFLAP	-11.700	SPOBRK	85.000	AEJ039	10.000	LREF	14.2440	N.	
		RUDDER	.000	ELEV-L	.000	AEJ041	20.000	BRF	28.1004	N.	
		ELEV-R	.000					YMRP	32.3010	N.	
								ZMRP	.0000	N.	
								SCALE	11.2500	N.	
									.0300		

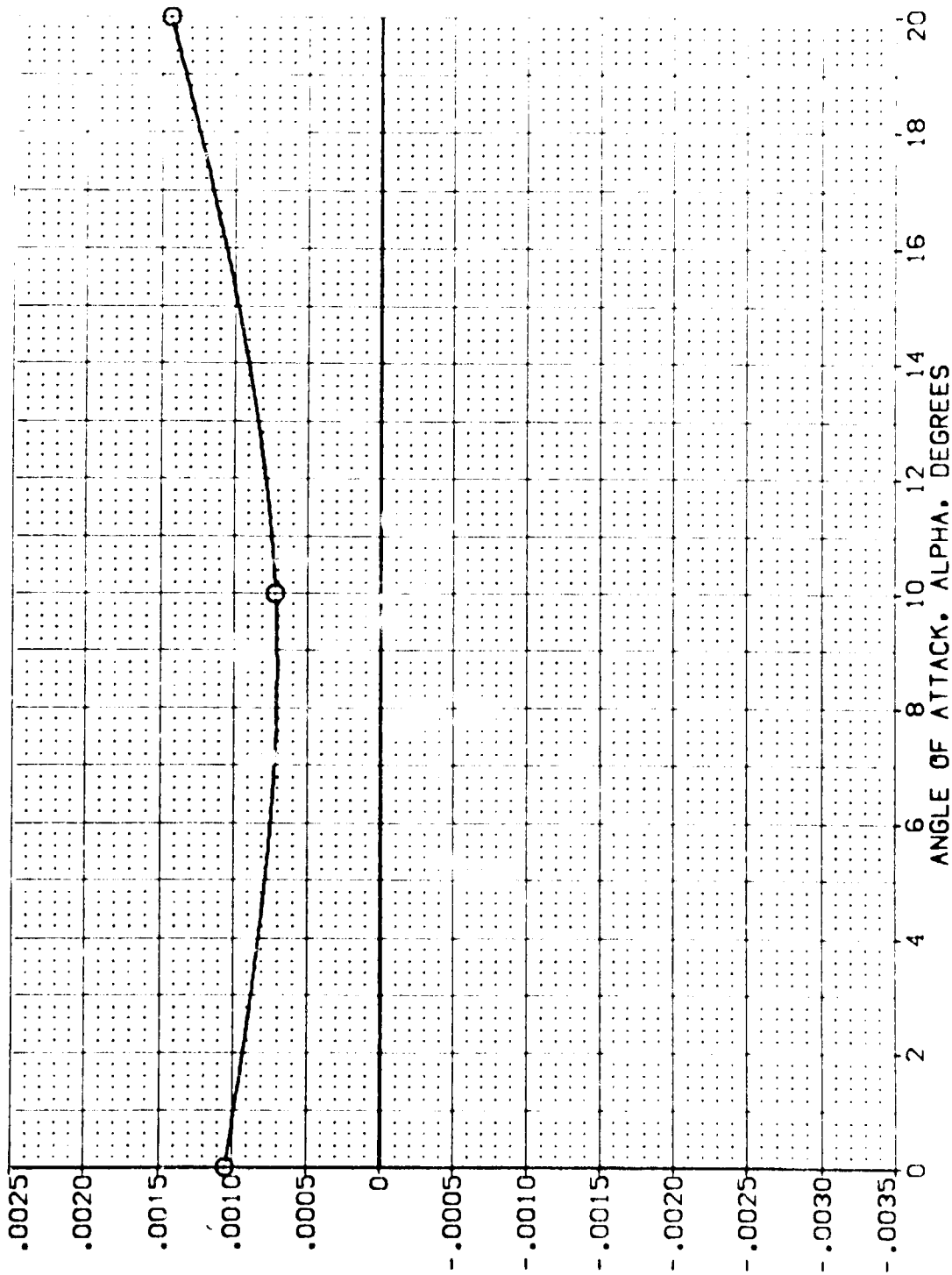


FIG. 16 LAT-DIR DERIVATIVES OF TOTAL VEHICLE-PART 3

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (AEJ039)

SYMBOL		MACH	PARAMETRIC VALUES				DATA SOURCE		REFERENCE INFORMATION		
	0	.800	ELEVON	.000	AILRON	.000	ALPHA	ALPHA	SREF	2.4210	SO. FT.
			BD FLAP	-11.700	SPDRK	.000	.000	AEJ040	LREF	14.2440	IN.
			RUDER	.000	ELEV-L	.000	20.000		XMRP	28.1004	IN.
			ELEV-R	.000					YMRP	32.3010	IN.
									ZMRP	.0000	IN.
									SCALE	11.2500	IN.
										.0300	SCALE

YAWING MOMENT COEFFICIENT DERIVATIVE WITH BETA, CYMBET, PER DEGREE

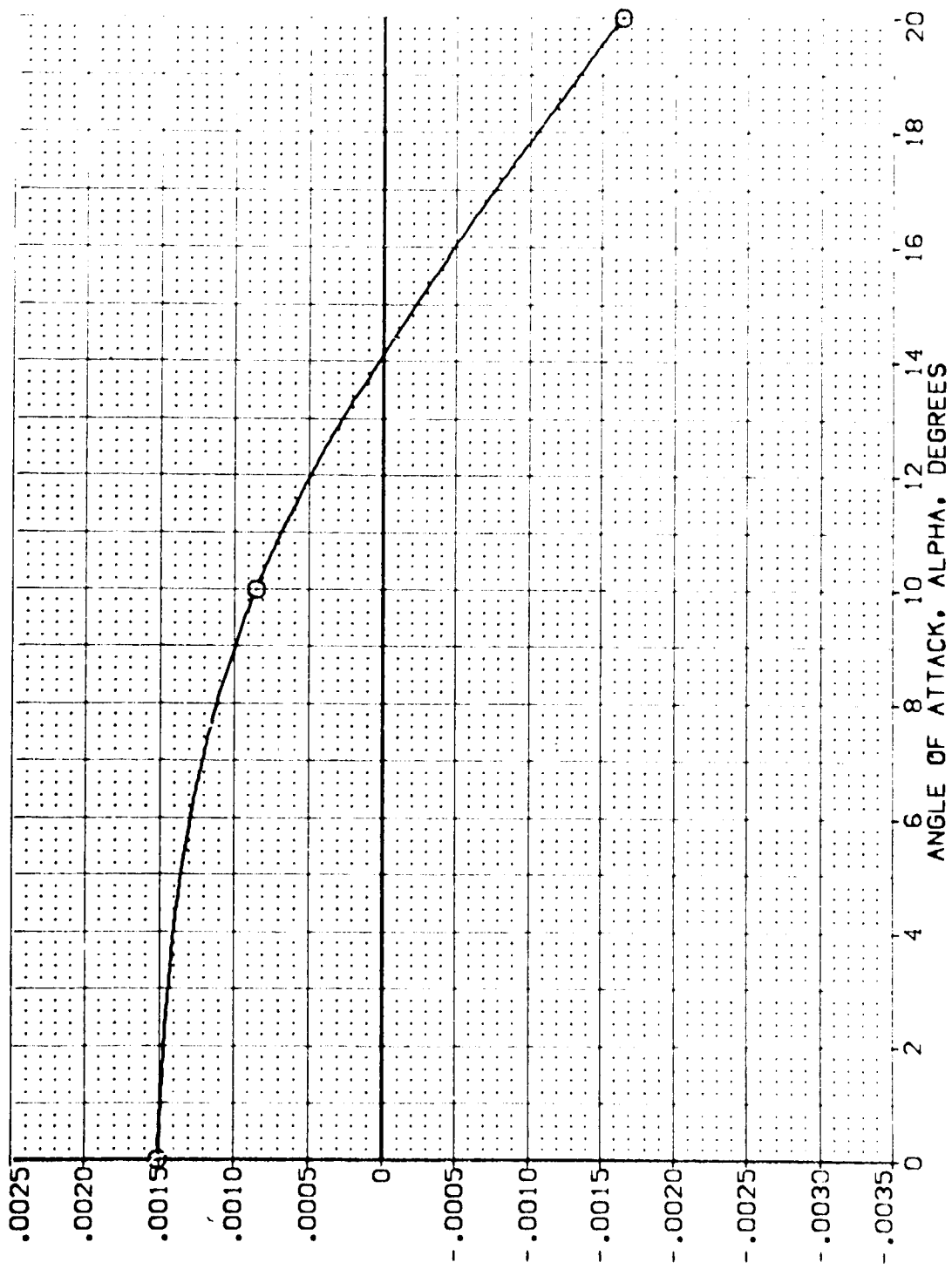


FIG. 16 LAT-DIR DERIVATIVES OF TOTAL VEHICLE-PART 3

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (AEJ039)

SYMBOL	MACH	PARAMETRIC VALUES				DATA SOURCE		REFERENCE INFORMATION			
0	.900	ELEVON	.000	AILRON	.000	AEJ039	ALPHA	10.000	SREF	2.4210	SO.FT.
		BOFLAP	-11.700	SPOBRK	.000	AEJ041	ALPHA	10.000	LREF	14.2410	IN.
		RUDDER	.000	ELEV-L	.000		AEJ040	AEJ040	BREF	28.1004	IN.
		ELEV-R	.000						YMRP	32.3010	IN.
									ZMRP	.0000	IN.
									ZMRP	11.2500	IN.
									SCALE	.0300	SCALE

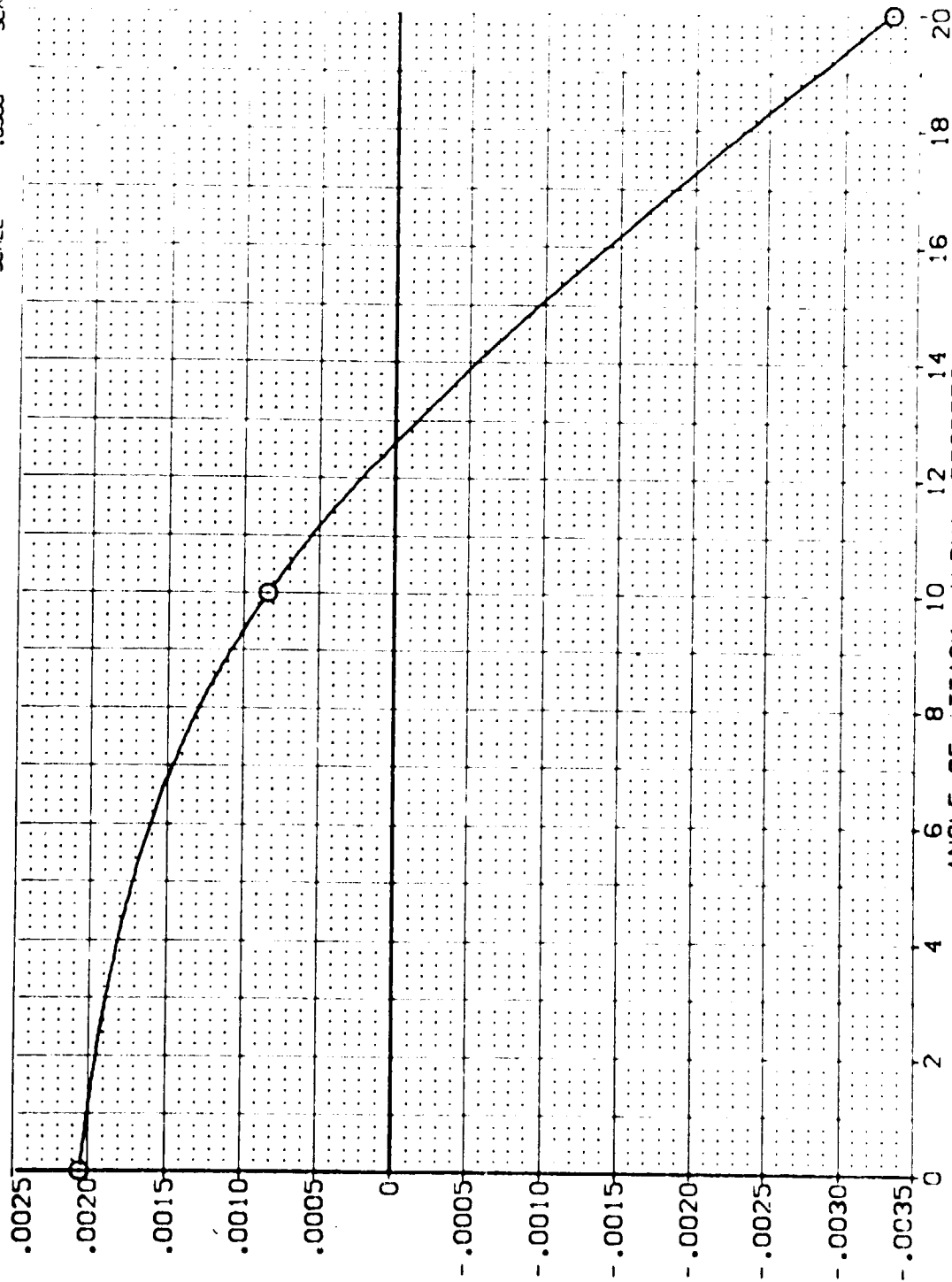


FIG. 16 LAT-DIR DERIVATIVES OF TOTAL VEHICLE-PART 3



ARC 11-747 0A53A B C M F W1 V NOM. RN/L (AEJ039)

SYMBOL  
O

MACH  
1.052

ELEVON  
BOFLAP  
RUDDER  
ELEV-R

PIDMETRIC VALUES  
.000 AILRON  
-11.700 SPDRBK  
.000 ELEV-L  
.000

.000 DATASET  
85.000 AEJ039  
.000 AEJ041

DATA SOURCE  
ALPHA  
20.000

DATASET  
AEJ040

ALPHA  
10.000

REFERENCE INFORMATION  
SREF 2.4210  
LREF 14.2440  
BREF 28.1004  
XMRP 32.3010  
YMRP .0000  
ZMRP 11.2500  
SCALE .0300

YAWING MOMENT COEFFICIENT DERIVATIVE WITH BETA, CYNBET, PER DEGREE

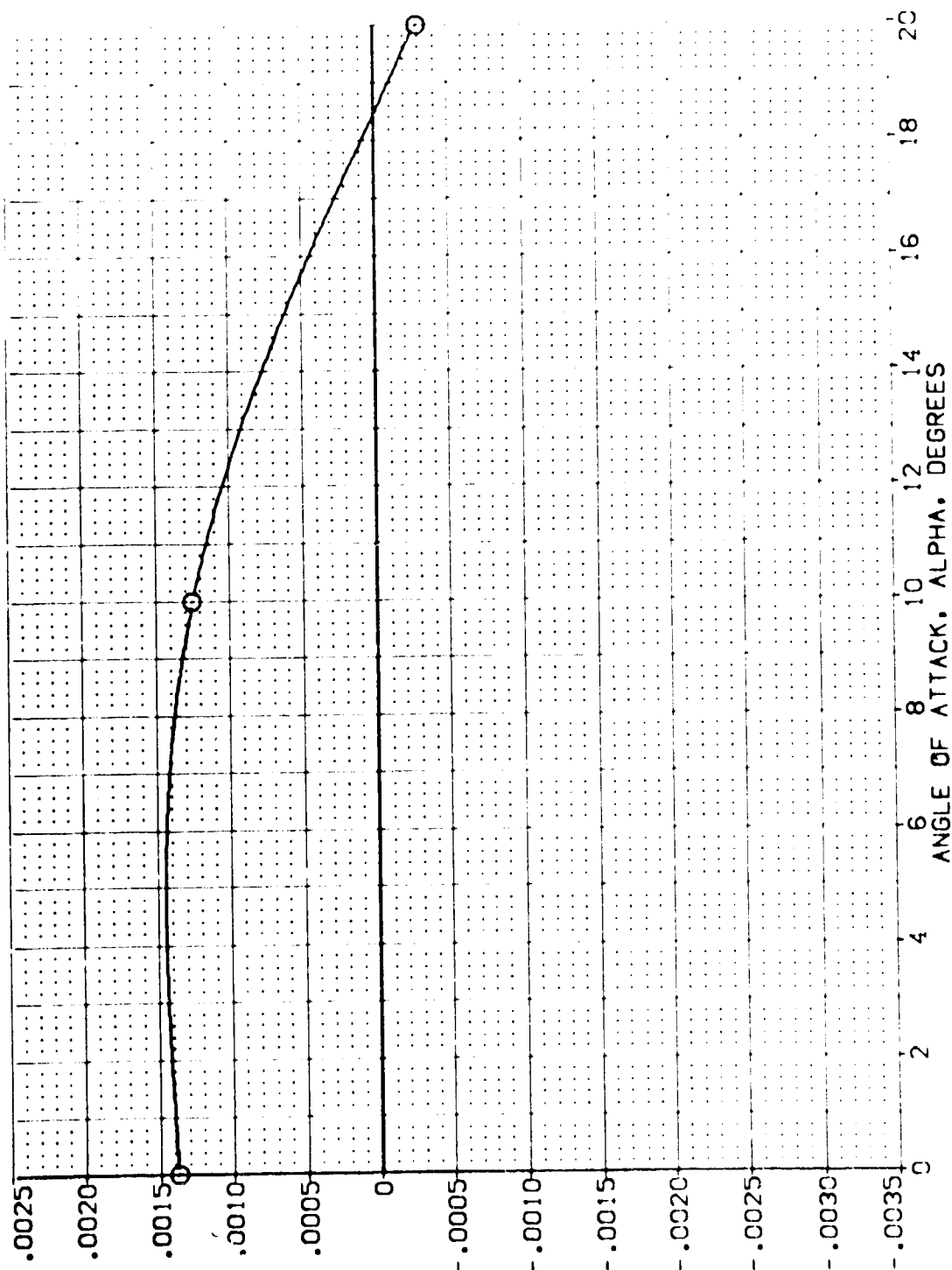


FIG. 16 LAT-DIR DERIVATIVES OF TOTAL VEHICLE-PART 3

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (AEJ039)

SYMBOL MACH 1.201

PARAMETRIC VALUES  
ELEVON .000 AILRON .000 DATASET .000 DATA SOURCE  
BDFLAP -11.700 SPDRBK 85.000 AEJ039 ALPHA .000  
RUDDER .000 ELEV-L .000 AEJ041 20.000  
ELEV-R .000

REFERENCE INFORMATION  
SREF 2.4210 SQ.FT.  
LREF 14.2440 N.  
BREF 28.1004 N.  
XMRP 32.3010 N.  
YMRP .0000 N.  
ZMRP 11.2500 N.  
SCALE .0300

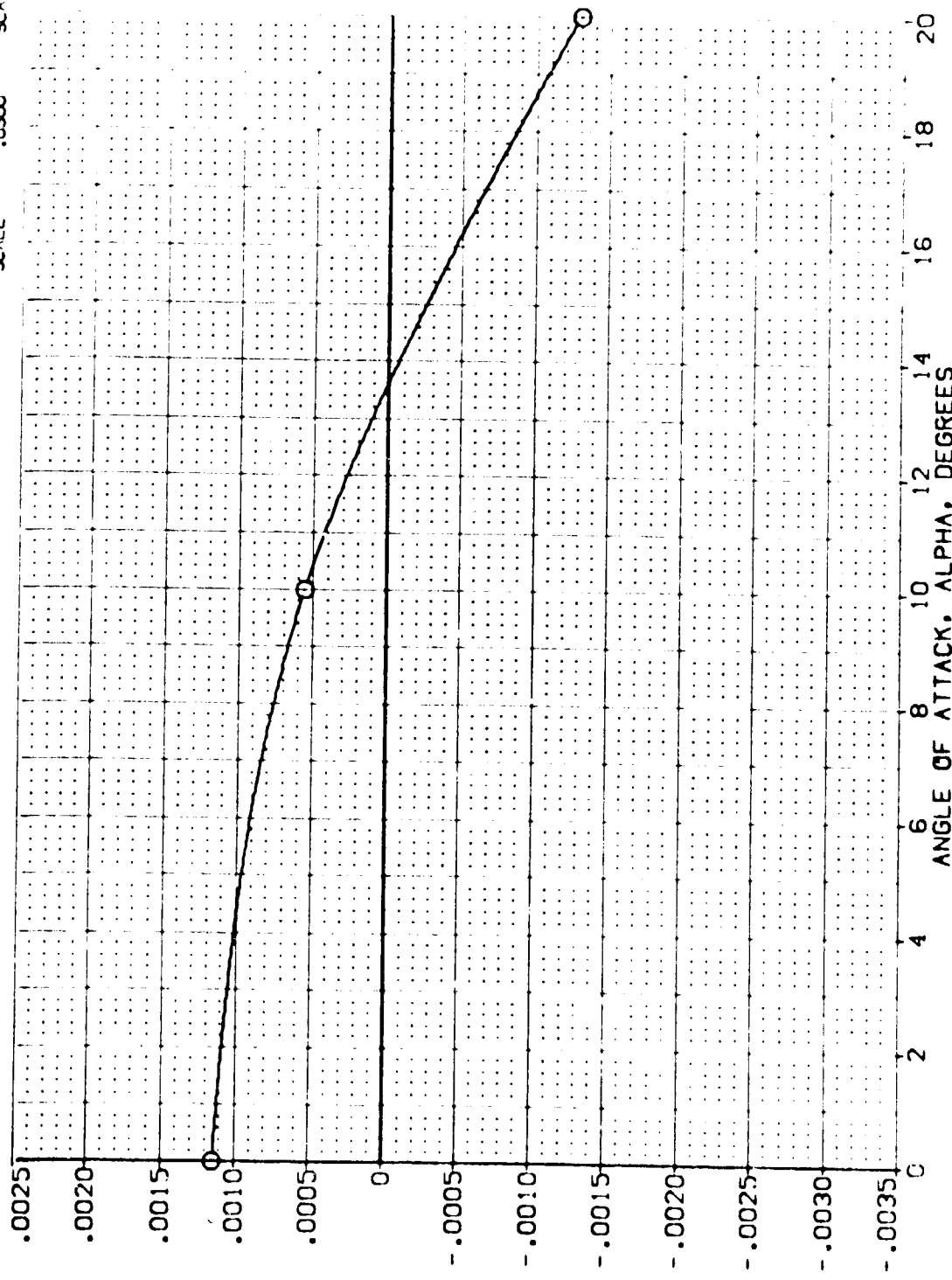


FIG. 16 LAT-DIR DERIVATIVES OF TOTAL VEHICLE-PART 3

YAWING MOMENT COEFFICIENT DERIVATIVE WITH BETA, CYNBET, PER DEGREE

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (AEJ039)

SYMBOL MACH  
O .559

PARAMETRIC VALUES  
ELEVON .000  
BOFLAP -11.700  
RUDDER .000  
ELEV-R .000

DATA SOURCE  
DATASET .000  
ALPHA AEJ039  
CJD 20.000

DATASET ALPHA  
AEJ040 10.000

REFERENCE INFORMATION  
SREF 2.4210 SQ.FT.  
LREF 14.2440 IN.  
BREF 28.1004 IN.  
XMRP 32.3010 IN.  
YMRP .0000 IN.  
ZMRP 11.2500 IN.  
SCALE .0300

ROLLING MOMENT COEFFICIENT DERIVATIVE WITH BETA, CBLBET, PER DEGREE

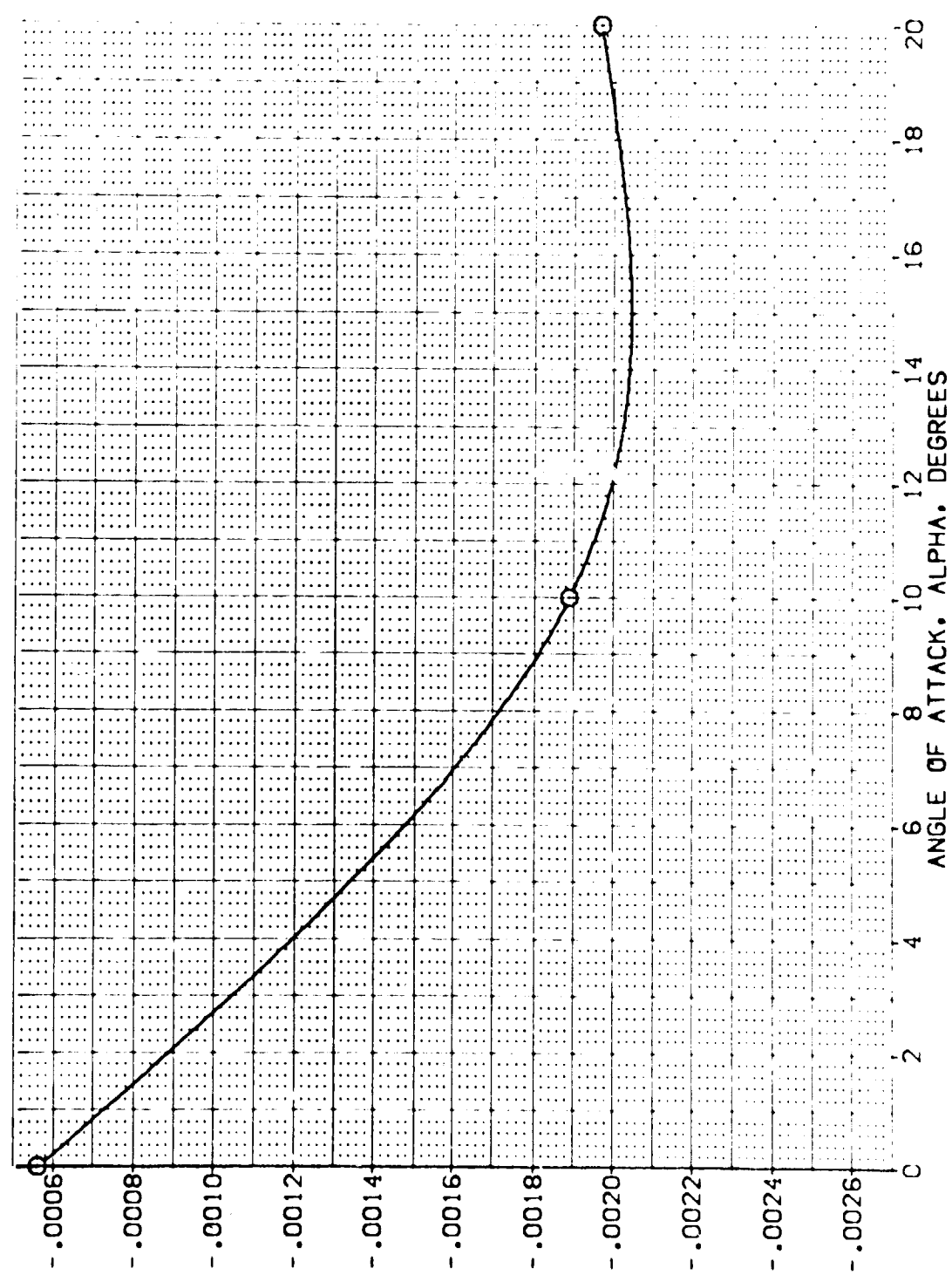


FIG. 16 LAT-DIR DERIVATIVES OF TOTAL VEHICLE-PART 3



ARC 11-747 0A53A B C M F W1 V NOM. RN/L (AEJ039)

SYMBOL	MACH	PARAMETRIC VALUES				DATA SOURCE		REFERENCE INFORMATION			
		ELEVON	AILRON	SPDBRK	ELEV-L	.000	AEJ039	SREF	LREF	BREF	SO.FT.
0	.800	-11.700	.000	.000	.000	.000	AEJ041	14.2440	28.1004	32.3010	IN.
		BOFLAP				.000		YMRP	11.2500	11.2500	IN.
		RUDER				.000		ZMRP			IN.
		ELEV-R				.000		SCALE			SCALE

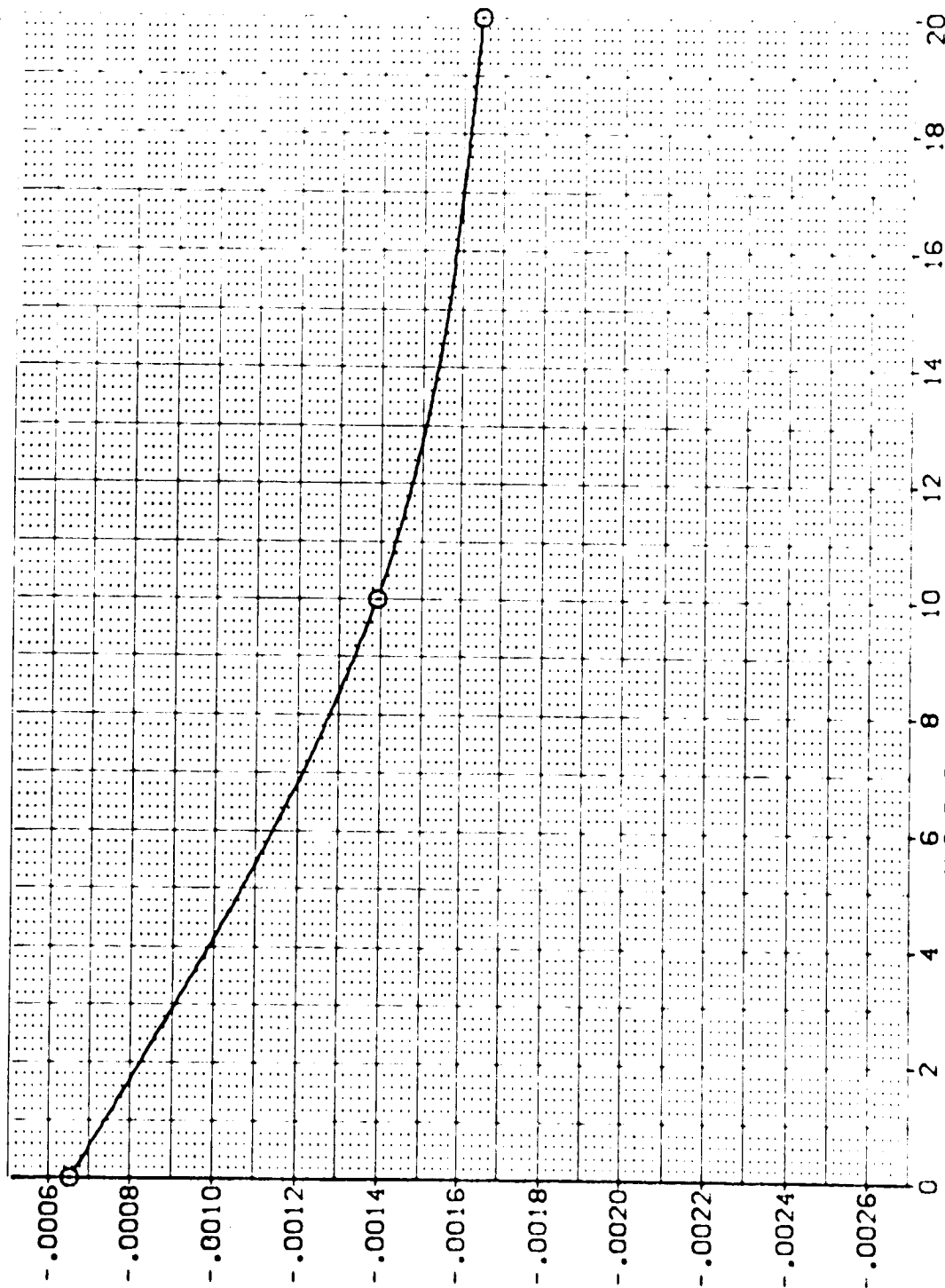


FIG. 16 LAT-DIR DERIVATIVES OF TOTAL VEHICLE-PART 3

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (AEJ039)

SYMBOL	0	MACH	.900	ELEVON	.000	AILRON	.000	DATASET	.000	AEJ039	DATA SOURCE	ALPHA	.000	20.000	DATASET	AEJ040	ALPHA	10.000	SREF	2.4210	SO.F.T.	14.2440
				BOFLAP	-11.700	SPOBRK	85.000	AEJ041	.000	AEJ041								LREF	28.1004			
				RUDDER	.000	ELEV-L	.000											BREF	32.7010			
				ELEV-R	.000													YMRP	.0000			
																		ZMRP	11.7500			
																		SCALE	.0300			

ROLLING MOMENT COEFFICIENT DERIVATIVE WITH BETA. CBLBET. PER DEGREE

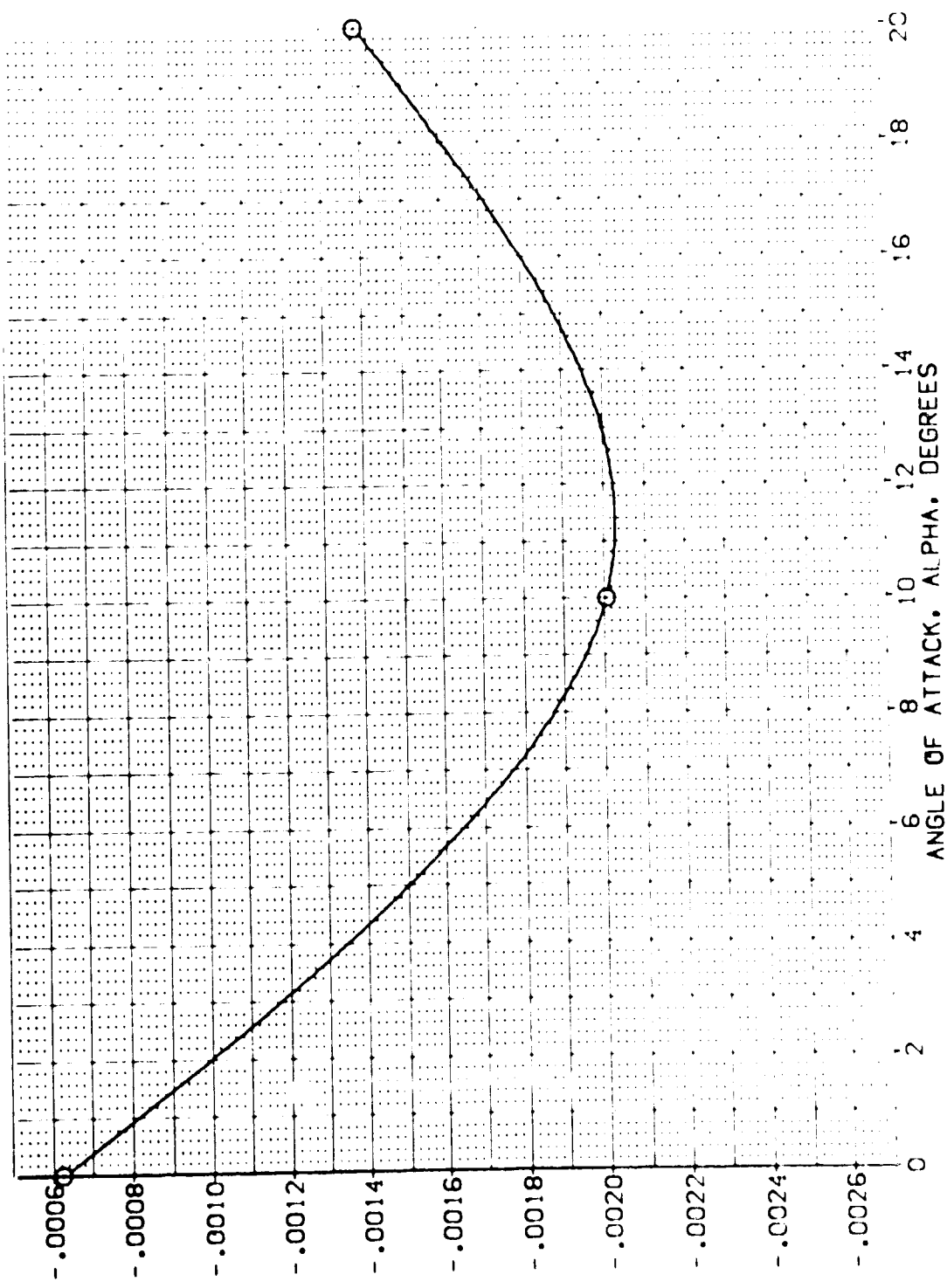


FIG. 16 LAT-DIR DERIVATIVES OF TOTAL VEHICLE-PART 3

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (AEJ039)

SYMBOL	MACH	PARAMETRIC VALUES				DATA SOURCE		REFERENCE INFORMATION			
0	1.052	ELEVON	.000	AIRRON	.000	AEJ040	AEJ040	SREF	2.4210	SO.F.F.	
		BOFLAP	-11.700	SPOBRK	65.000	AEJ039		LREF	14.2440		
		RUDDER	.000	ELEV-L	.000	AEJ041		SREF	28.1004		
		ELEV-R	.000					XPRP	32.3010		
								YPRP	.0000		
								ZPRP	11.2500		
								SCALE	.0300		

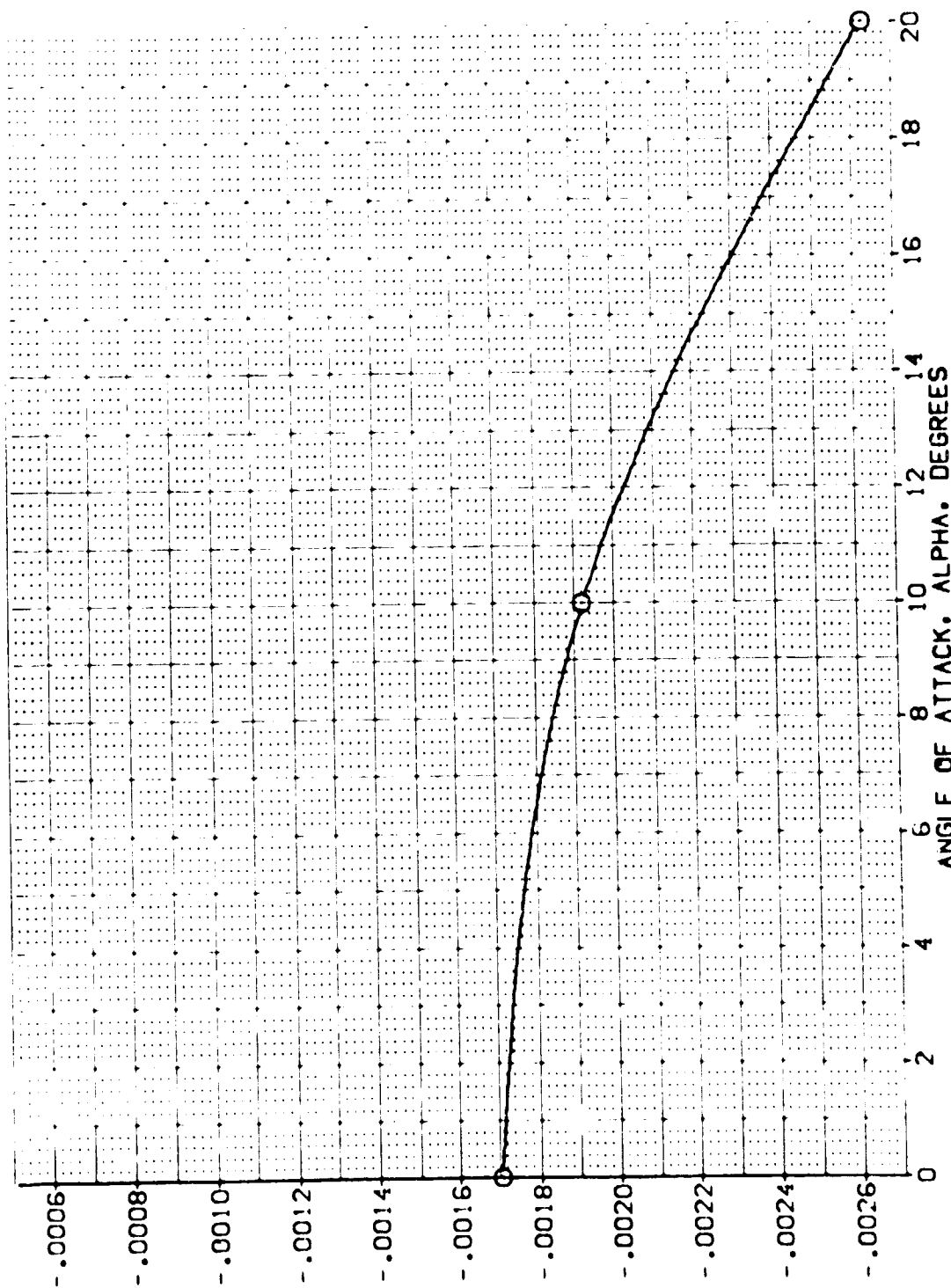


FIG. 16 LAT-DIR DERIVATIVES OF TOTAL VEHICLE-PART 3

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (AEJ039)

SYMBOL MACH  
O 1.201

PARAMETRIC VALUES  
ELEVON .000 AILRON  
BOFLAP -11.700 SPOBRK  
RUDDER .000 ELEV-L  
ELEV-R .000

DATA SOURCE  
ALPHA  
20.000

REFERENCE INFORMATION  
SC.FT.  
2.4210  
14.2440  
28.1004  
32.3010  
11.2500  
SCALE  
10.000  
10.000  
10.000  
10.000  
10.000  
10.000  
10.000

ROLLING MOMENT COEFFICIENT DERIVATIVE WITH BETA, CBLBET, PER DEGREE

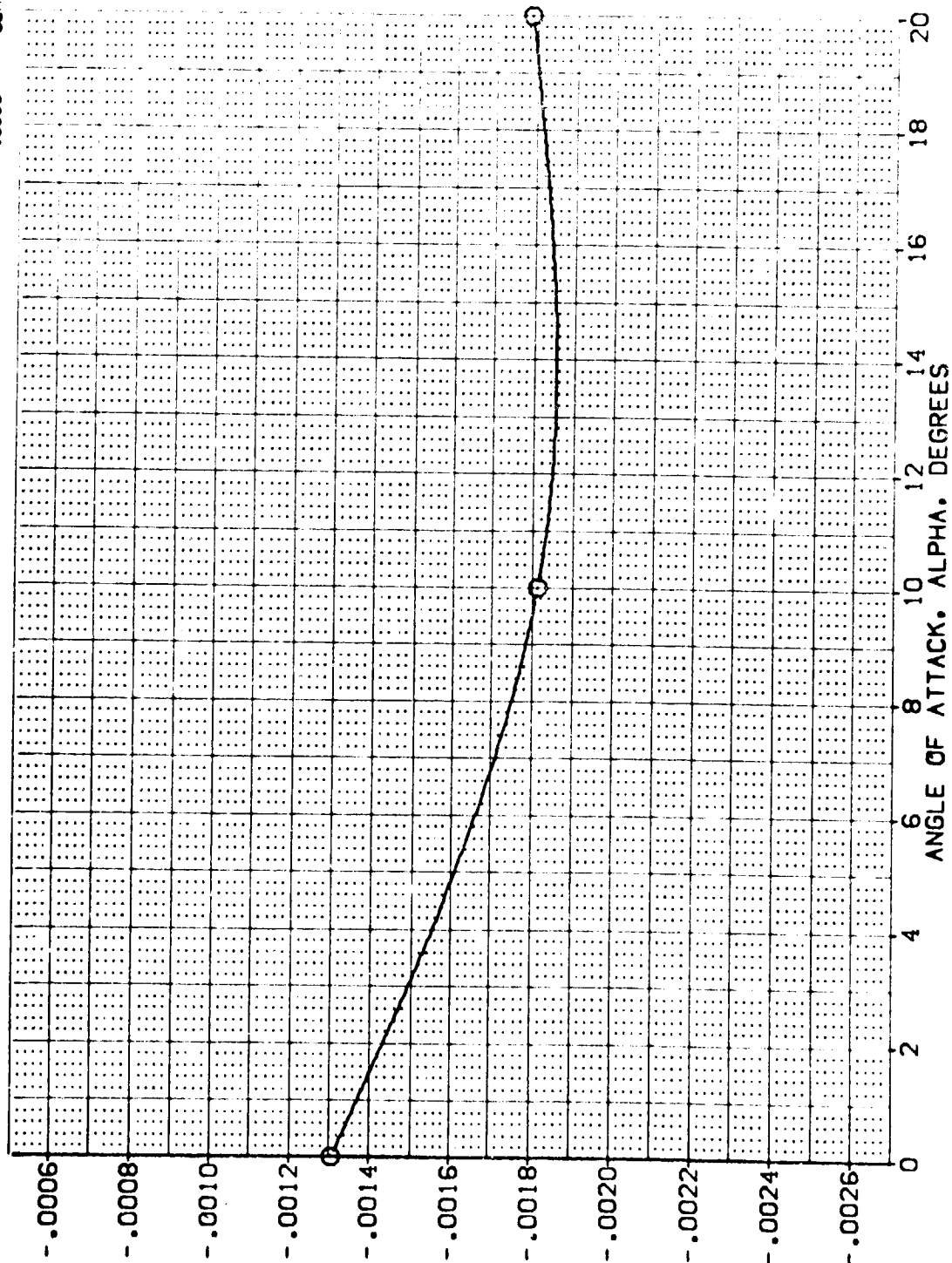


FIG. 16 LAT-DIR DERIVATIVES OF TOTAL VEHICLE-PART 3

DATA SET SYMBS. CONFIGURATION DESCRIPTION

DATA SET SYMBS.	CONFIGURATION DESCRIPTION	AILERON	ELEVON	BOFLAP	SP00BK	REFERENCE INFORMATION
[AEJ022]	ARC 11-747 DA53A B C M F V1	20.000	-20.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[AEJ025]	ARC 11-747 DA53A B C M F V1	5.000	-10.000	-11.700	25.000	LREF 14.2440 IN.
[AEJ004]	ARC 11-747 DA53A B C M F V1	5.000	0.000	-11.700	25.000	BREF 28.1004 IN.
[AEJ021]	ARC 11-747 DA53A B C M F V1	10.000	-10.000	-11.700	25.000	XMRP 32.3013 IN.
						YMRP 0.000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

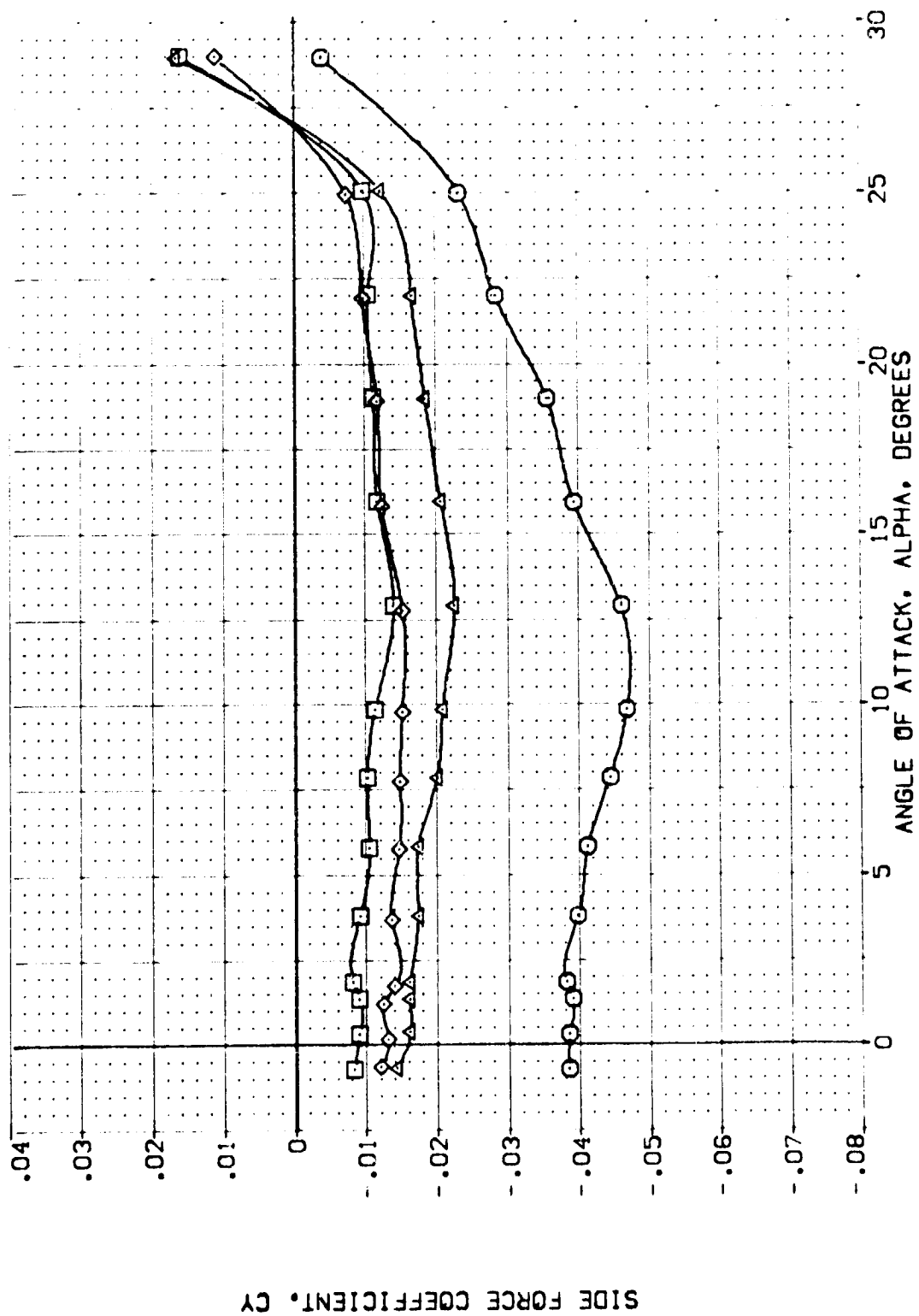


FIG. 17 AILERON EFFECTS

(A)MACH = .60



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	AILERON	ELEVON	BD FLAP	SPODBK	REFERENCE INFORMATION
[AEJ022]	ARC 11-747 OAS3A B C M F VI V	20.000	-20.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[AEJ005]	ARC 11-747 OAS3A B C M F VI V	5.000	-10.000	-11.700	25.000	LREF 14.2440 IN.
[AEJ004]	ARC 11-747 OAS3A B C M F VI V	10.000	-10.000	-11.700	25.000	BREF 28.1004 IN.
[AEJ021]	ARC 11-747 OAS3A B C M F VI V				25.000	XMRP 32.3010 IN.
						ZMRP .0000 IN.
						SCALE 11.2500 IN.

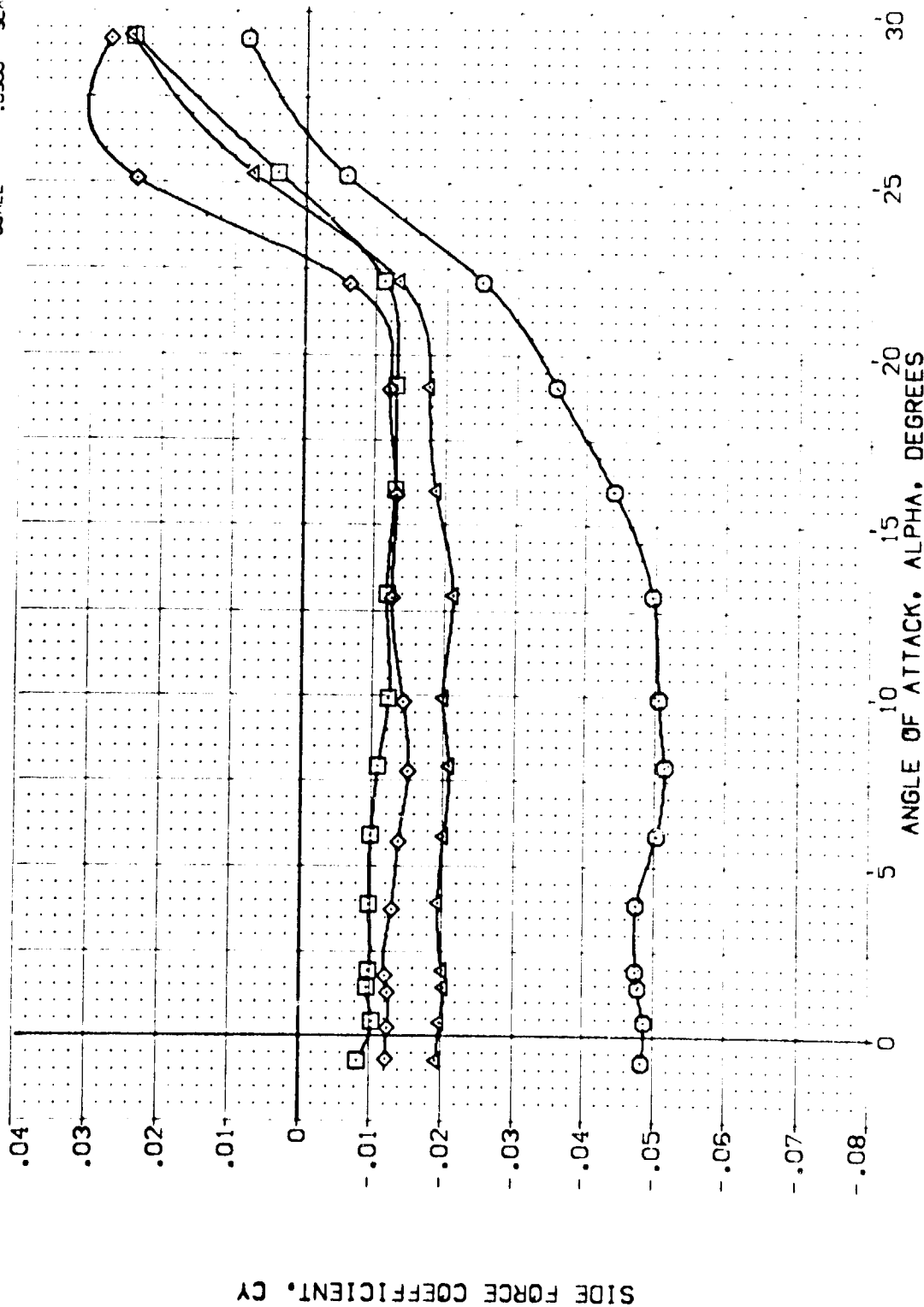


FIG. 17 AILERON EFFECTS

(B)  $M_{AC} = .80$

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	AILERON	ELEVON	BOFLAP	SPDBRK	REFERENCE INFORMATION
[AEJ022]	ARC 11-747 DA53A B C M F VI V	20.000	-20.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[AEJ005]	ARC 11-747 DA53A B C M F VI V	5.000	-10.000	-11.700	25.000	LREF 14.2440 IN.
[AEJ004]	ARC 11-747 DA53A B C M F VI V	5.000	0.000	-11.700	25.000	BREF 28.1004 IN.
[AEJ021]	ARC 11-747 DA53A B C M F VI V	10.000	-10.000	-11.700	25.000	YMRP 32.3010 IN.
						ZMRP 0.0000 IN.
						SCALE 11.7500 IN.

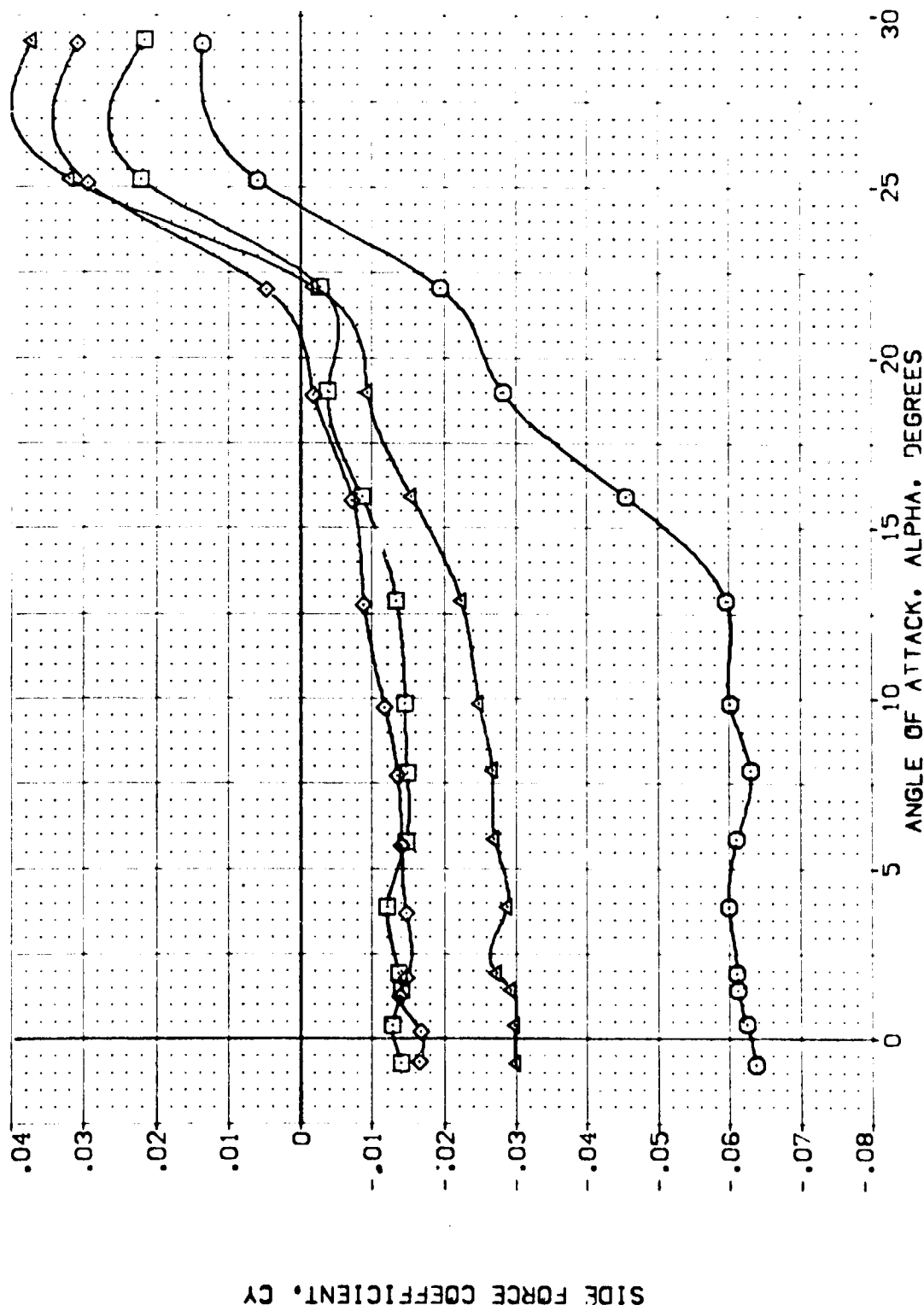


FIG. 17 AILERON EFFECTS

(C)<sub>MAC</sub> = .90

DATA SET SYMBOL: [AEJ022] [AEJ005] [AEJ004] [AEJ021]

CONFIGURATION DESCRIPTION: ARC 11-747 CAS3A B C M F VI V NOT: RN/L  
 ARC 11-747 CAS3A B C M F VI V NOT: RN/L  
 ARC 11-747 CAS3A B C M F VI V NOT: RN/L  
 ARC 11-747 CAS3A B C M F VI V NOT: RN/L

AILERON: 20.000 5.000 10.000

ELEVON: -20.000 -10.000 -10.000

BOFLAP: -11.700 -11.700 -11.700

SPDRBK: 25.000 25.000 25.000

REFERENCE INFORMATION: SREF 2.4210 SO.FT. IN.  
 LREF 14.2440 IN.  
 BREF 28.1004 IN.  
 XMRP 32.3010 IN.  
 YMRP .0000 IN.  
 ZMRP 11.2500 IN.  
 SCALE .0300

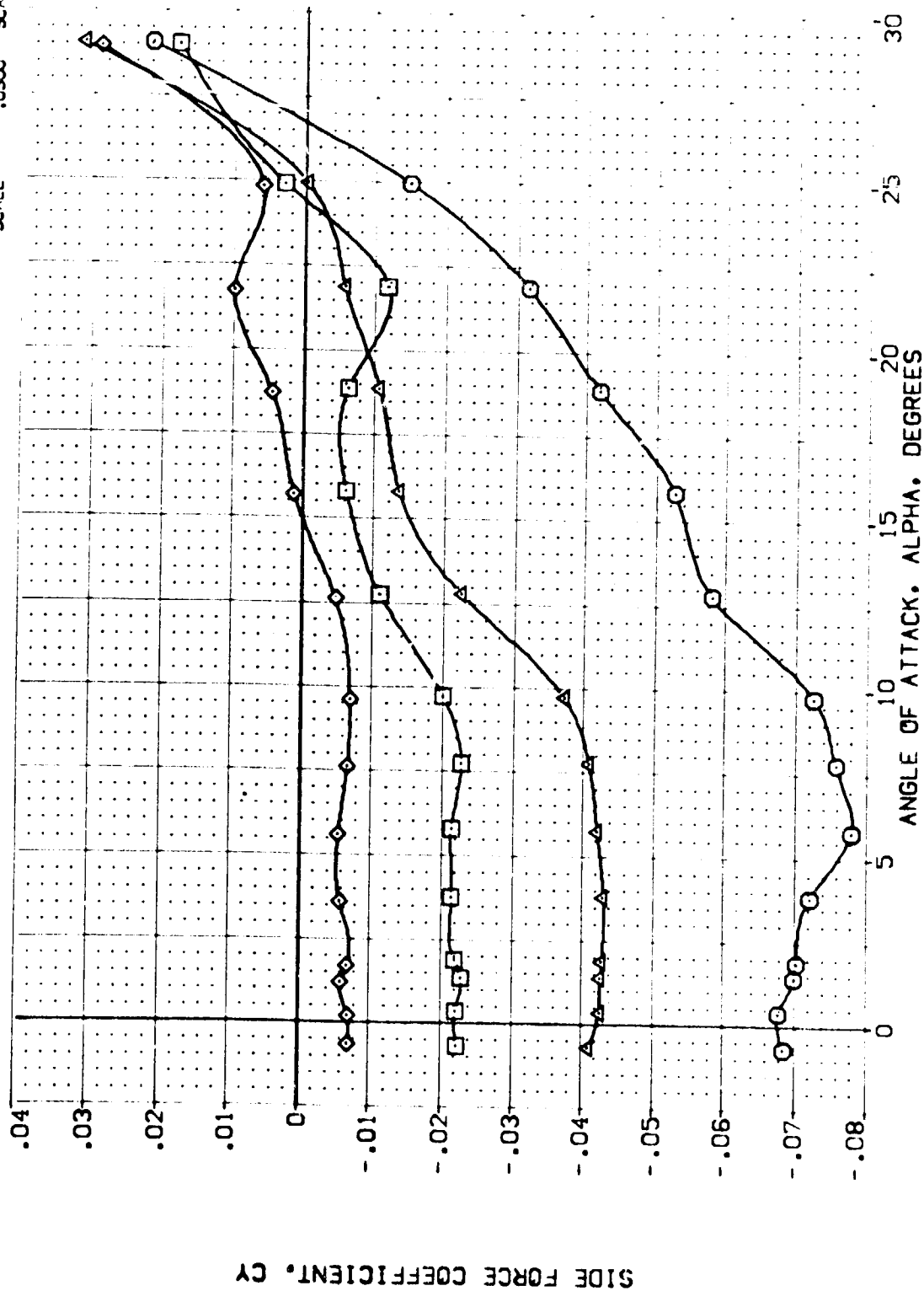


FIG. 17 AILERON EFFECTS

(0)  $MACH = 1.05$

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	AILERON	ELEVON	BOFLAP	SPDRK	REFERENCE INFORMATION
[AEJ022]	ARC 11-747 CAS3A B C M F VI	20.000	-20.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[AEJ005]	ARC 11-747 CAS3A B C M F VI	5.000	-10.000	-11.700	25.000	LREF 14.2410 IN.
[AEJ004]	ARC 11-747 CAS3A B C M F VI	5.000	-10.000	-11.700	25.000	BREF 28.1004 IN.
[AEJ021]	ARC 11-747 CAS3A B C M F VI	10.000	-10.000	-11.700	25.000	XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

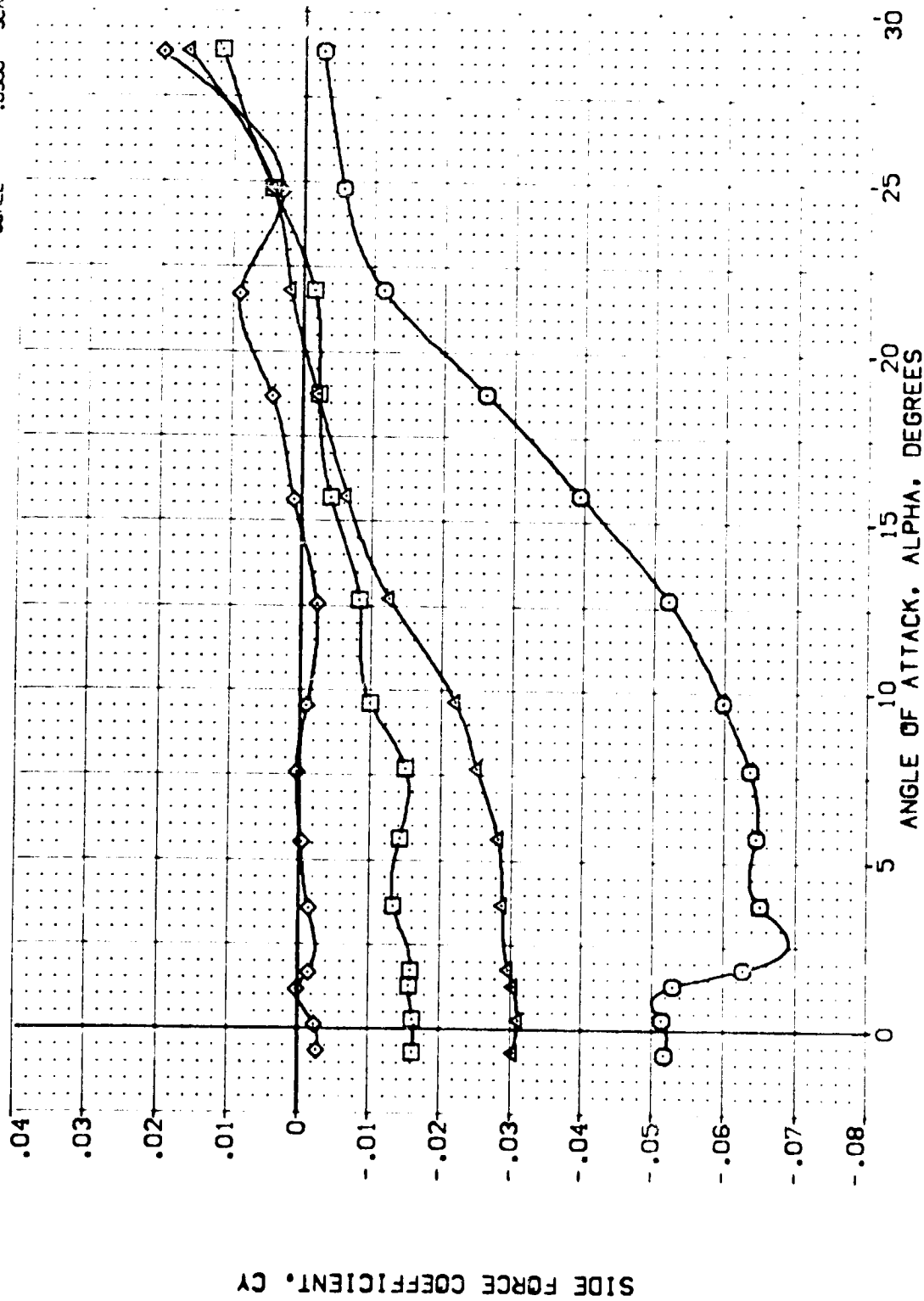


FIG. 17 AILERON EFFECTS

(E)MACH = 1.20

# DATA SET SYMBOL

{ AEJ002 }  
{ AEJ005 }  
{ AEJ004 }  
{ AEJ021 }



# CONFIGURATION DESCRIPTION

ARC 11-747 GAS3A B C M F VI V NM: RV/L  
ARC 11-747 GAS3A B C M F VI V NM: RV/L  
ARC 11-747 GAS3A B C M F VI V NM: RV/L  
ARC 11-747 GAS3A B C M F VI V NM: RV/L

# AILERON

20.000  
5.000  
10.000

# ELEVON

-20.000  
-10.000  
-10.000

# BOFLAP

-11.700  
-11.700  
-11.700

# SPOBRK

25.000  
25.000  
25.000

# REFERENCE INFORMATION

SREF 2.4210 SQ.FT.  
LREF 14.2440 IN.  
BREF 28.1004 IN.  
XMRP 32.3010 IN.  
YMRP 0.0000 IN.  
ZMRP 11.2500 IN.  
SCALE 0.0300

YAWING MOMENT COEFFICIENT, CYN (BODY AXIS)

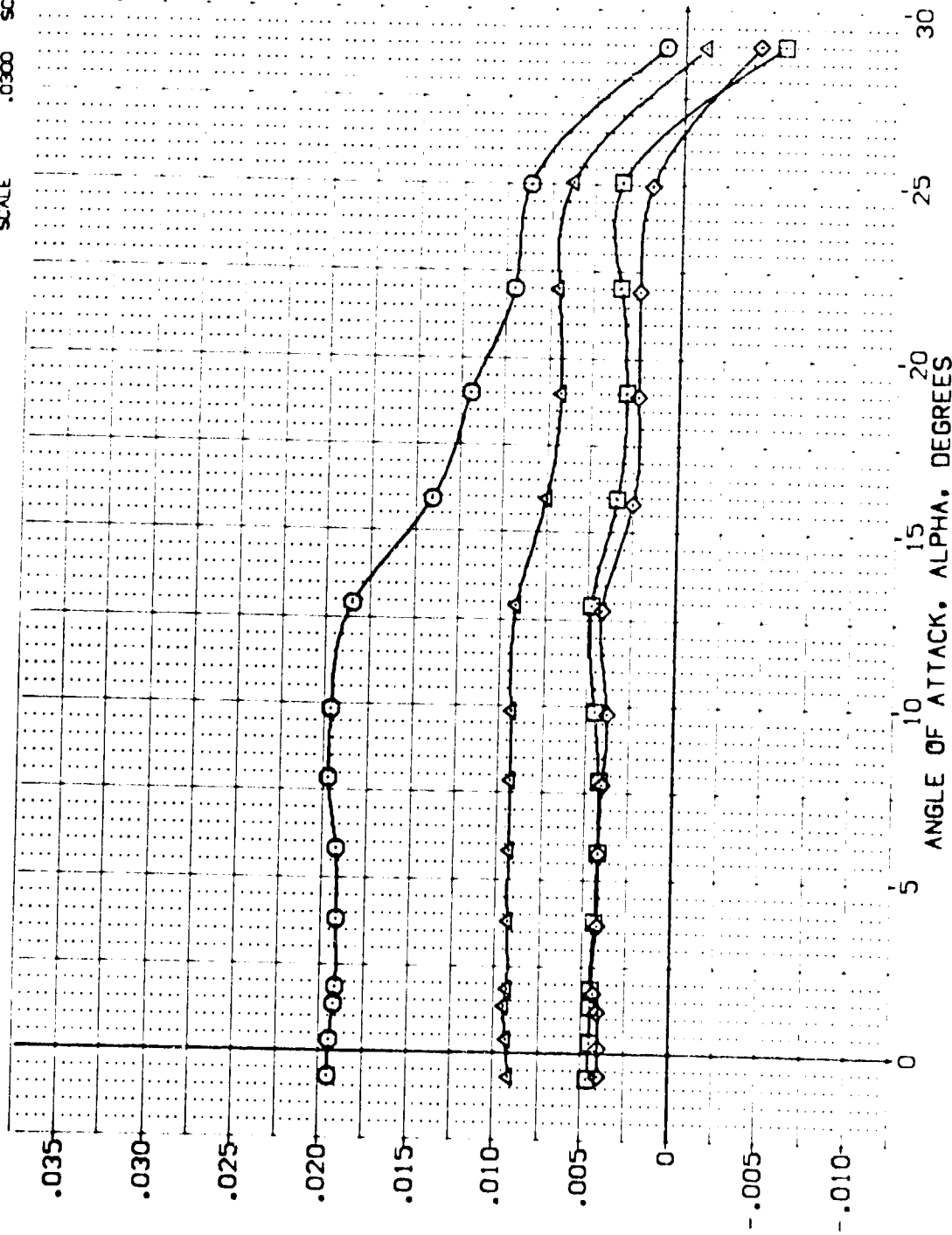


FIG. 17 AILERON EFFECTS

(A)MACH = .60

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	AILERON	ELEVON	BOFLAP	SPDRBK	REFERENCE INFORMATION
{AEJ002}	□	ARC 11-747 OA53A B C H F V	20.000	-20.000	-11.700	25.000	SREF 2.4210 SQ.FT.
{AEJ005}	△	ARC 11-747 OA53A B C H F V	5.000	-10.000	-11.700	25.000	LREF 14.2440 IN.
{AEJ004}	×	ARC 11-747 OA53A B C H F V	5.000	.000	-11.700	25.000	BREF 28.1004 IN.
{AEJ001}	○	ARC 11-747 OA53A B C H F V	10.000	-10.000	-11.700	25.000	YREF 32.3010 IN.
							YREF 32.3010 IN.
							ZREF 11.2500 IN.
							SCALE .0300

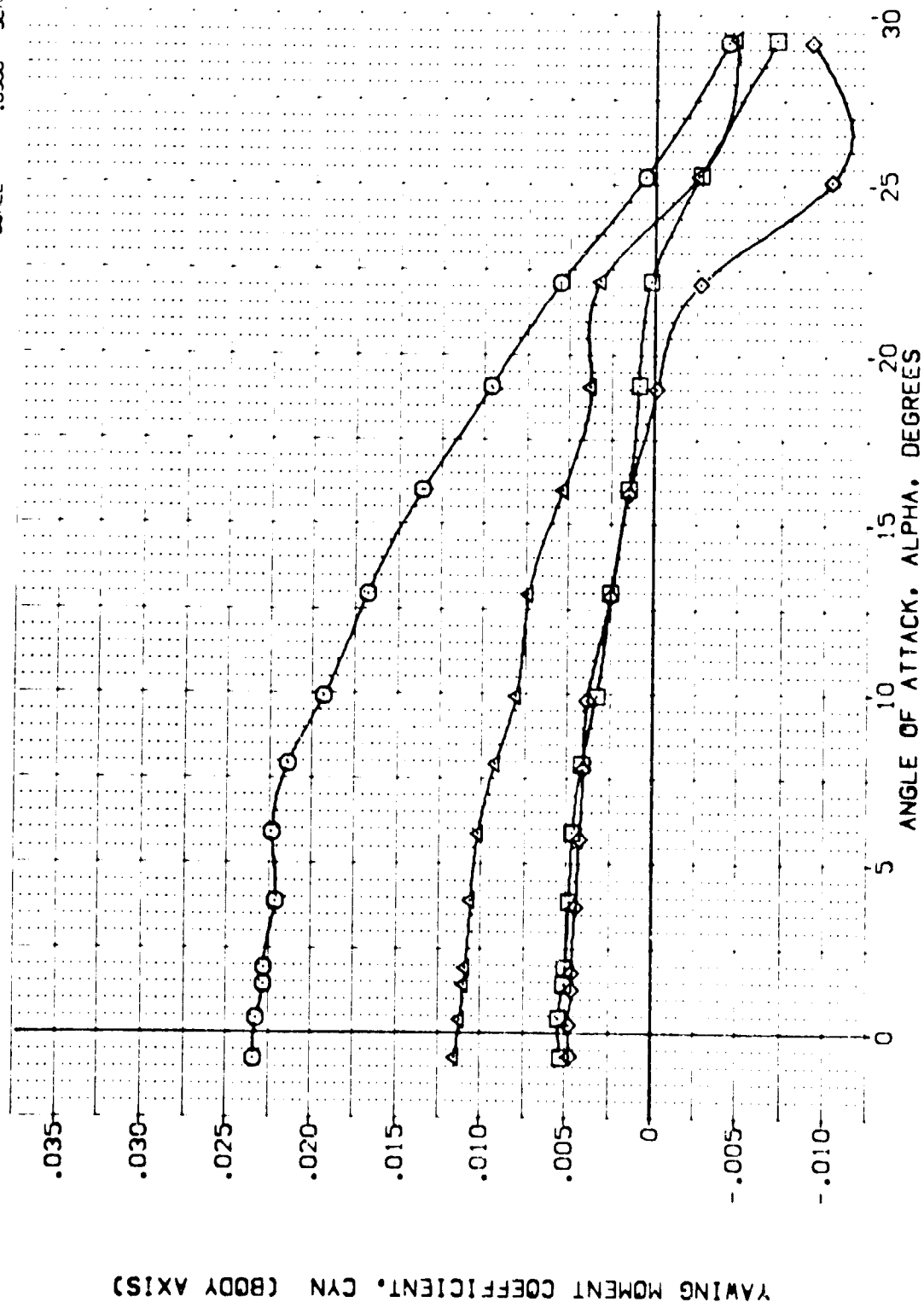


FIG. 17 AILERON EFFECTS

(B)  $MACH = .80$

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	AILERON	ELEVON	BDELAP	SPODBK	REFERENCE INFORMATION
[AEJ022]	ARC 11-747 D453A B C M F V	20.000	-20.000	-11.700	25.000	SREF 2.4210 50. FT.
[AEJ005]	ARC 11-747 D453A B C M F V	5.000	-10.000	-11.700	25.000	LREF 14.2440
[AEJ004]	ARC 11-747 D453A B C M F V	10.000	-10.000	-11.700	25.000	BREF 28.1004
[AEJ021]	ARC 11-747 D453A B C M F V	10.000	-10.000	-11.700	25.000	YREF 32.3010
						ZREF 11.2500
						SCALE .0300

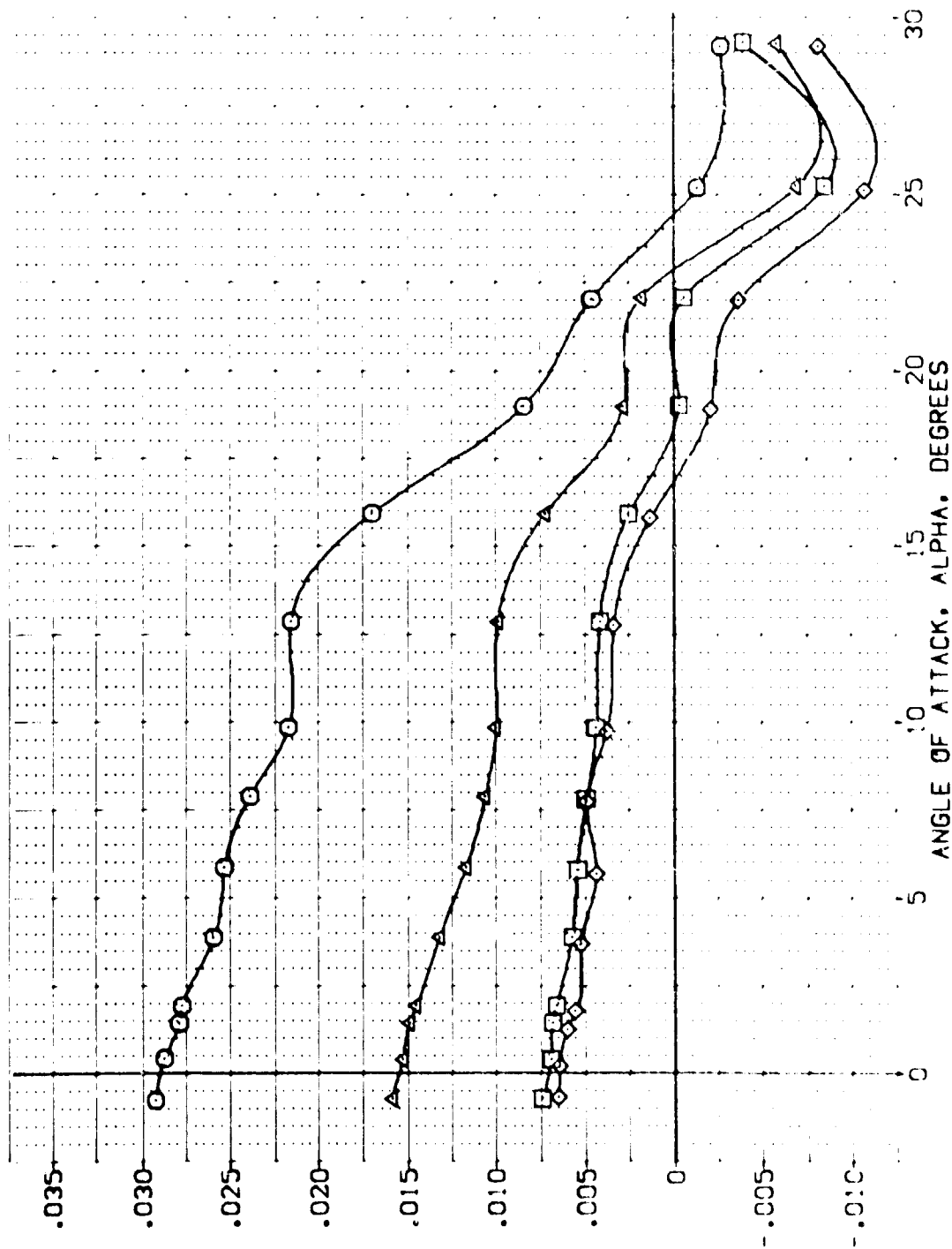


FIG. 17 AILERON EFFECTS

(C) 1964 = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	AILERON	ELEVON	BOFLAP	SPOBRK	REFERENCE INFORMATION
[AEJ022]	ARC 11-747 DA53A B C M F V	20.000	-20.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[AEJ005]	ARC 11-747 DA53A B C M F V	5.000	-10.000	-11.700	25.000	LREF 14.2440 IN.
[AEJ004]	ARC 11-747 DA53A B C M F V	10.000	.000	-11.700	25.000	BREF 28.1004 IN.
[AEJ021]	ARC 11-747 DA53A B C M F V	10.000	-10.000	-11.700	25.000	XMRD 32.3010 IN.
						YMRD 11.2500 IN.
						SCALE .0300

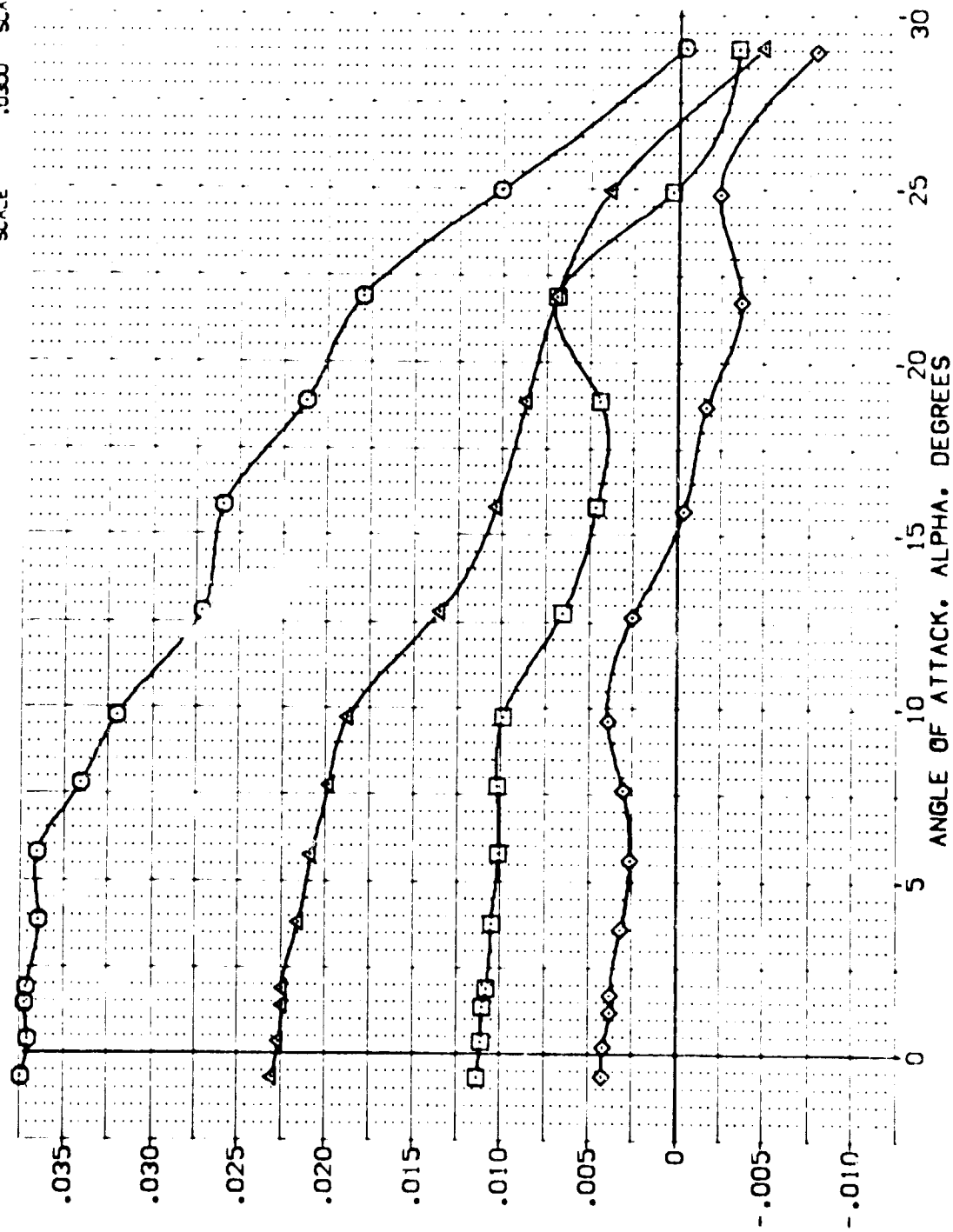


FIG. 17 AILERON EFFECTS

(C)  $MACH = 1.05$



DATA SET SYMBOL    CONFIGURATION DESCRIPTION    AILERON    ELEVON    BDF LAP    SPDBRK    REFERENCE INFORMATION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	AILERON	ELEVON	BDF LAP	SPDBRK	REFERENCE INFORMATION
[AEJ002]	ARC 11-747 OA53A B C H F V V	20.000	-20.000	-11.700	25.000	SREF 2.4210 50.FT.
[AEJ005]	ARC 11-747 OA53A B C H F V V	5.000	-10.000	-11.700	25.000	LREF 14.2440 N.
[AEJ004]	ARC 11-747 OA53A B C H F V V	5.000	0.000	-11.700	25.000	BREF 28.1004 N.
[AEJ021]	ARC 11-747 OA53A B C H F V V	10.000	-10.000	-11.700	25.000	XMRP 32.3010 N.
						YMRP 0.0000 N.
						ZMRP 11.2500 N.
						SCALE 0.0000 SCALE

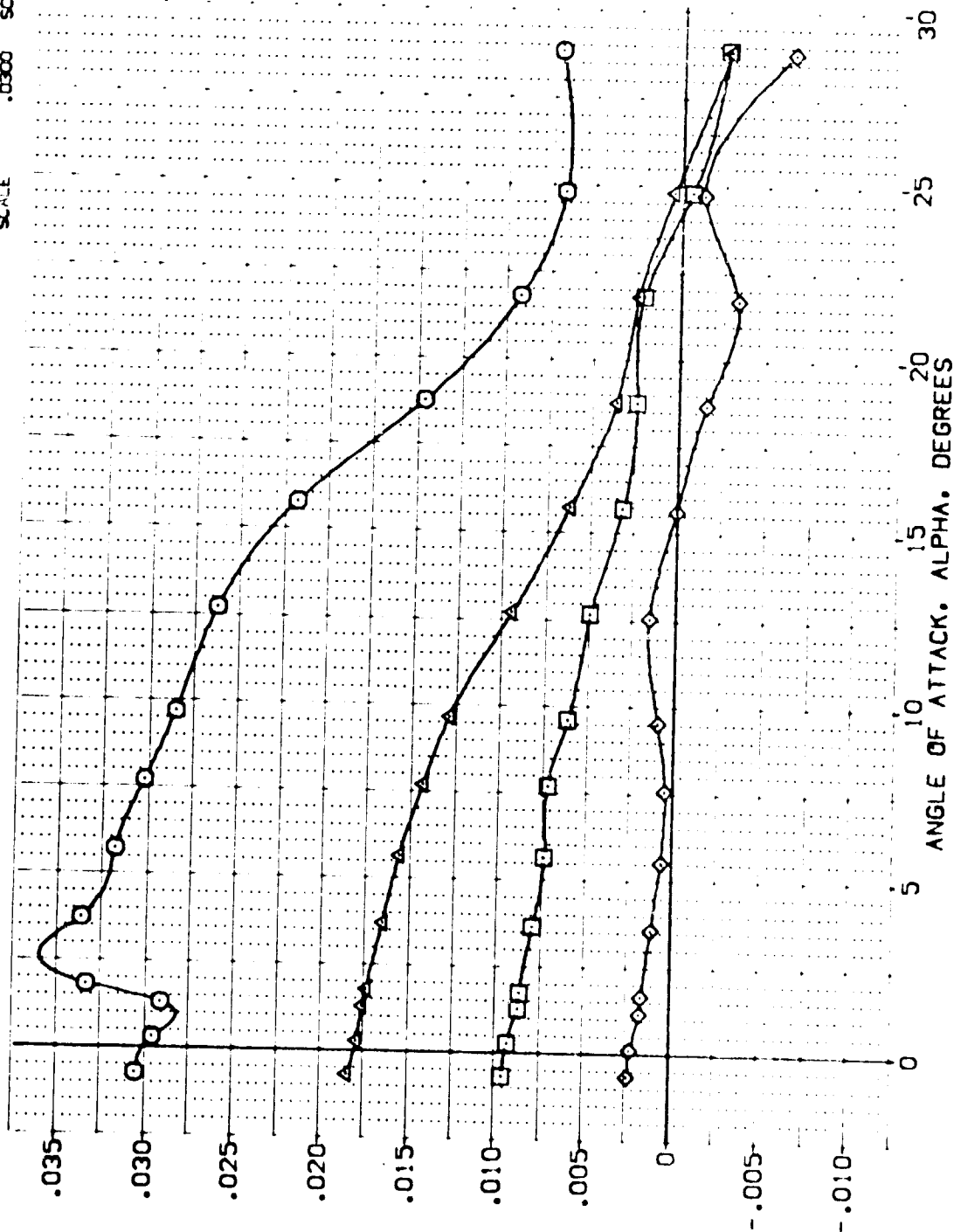


FIG. 17 AILERON EFFECTS

(E)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	AILERON	ELEVON	BDFLAP	SPDRBK	REFERENCE INFORMATION
[AEJ022]	ARC 11-747 DA53A B C H F VI V	20.000	-20.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[AEJ005]	ARC 11-747 DA53A B C H F VI V	5.000	-10.000	-11.700	25.000	LREF 14.244C IN.
[AEJ004]	ARC 11-747 DA53A B C H F VI V	5.000	.000	-11.700	25.000	BREF 28.1004 IN.
[AEJ021]	ARC 11-747 DA53A B C H F VI V	10.000	-10.000	-11.700	25.000	XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

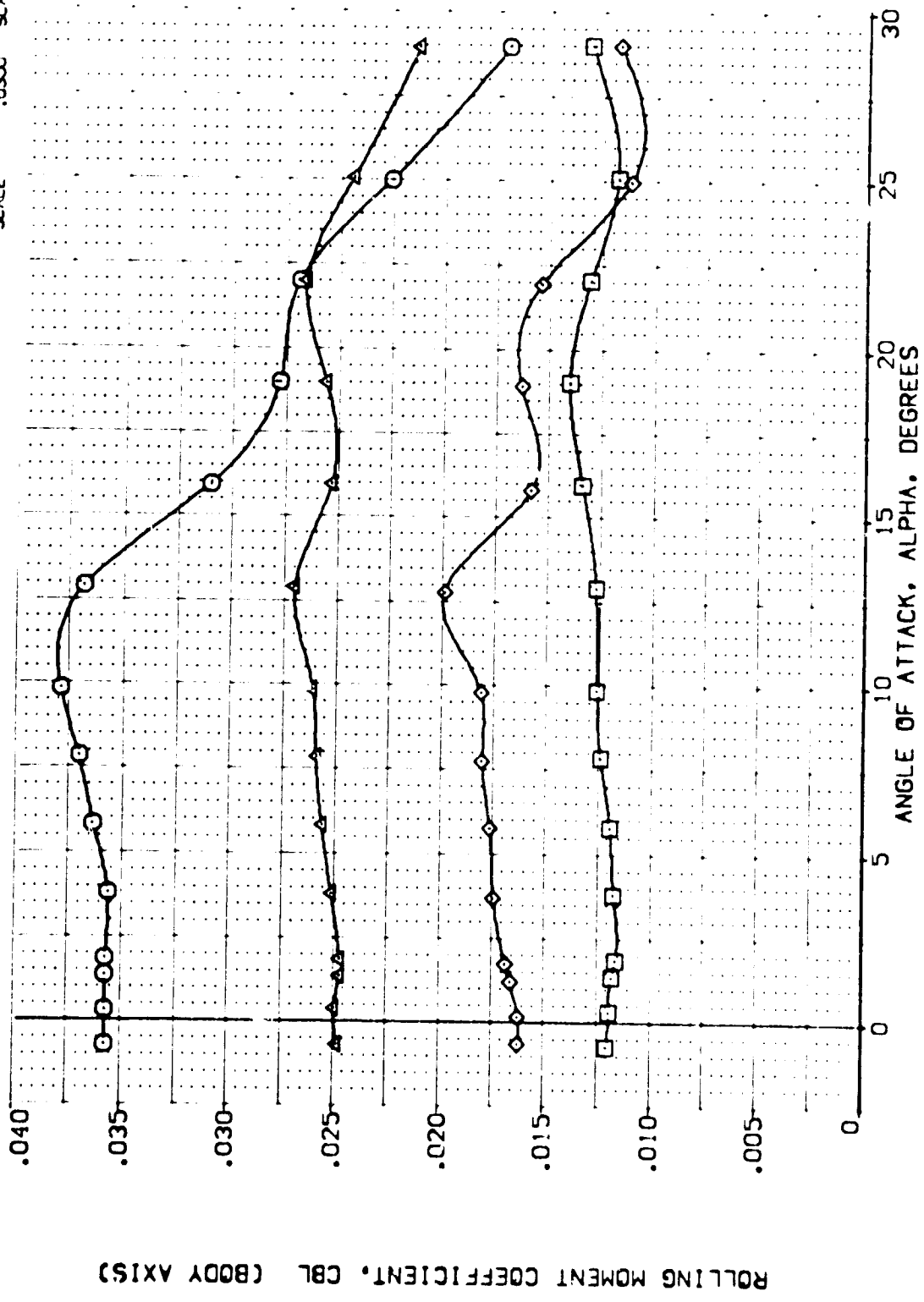


FIG. 17 AILERON EFFECTS

(A)MAC = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	AILERON	ELEVON	BOULAP	SPOTBAR	REFERENCE INFORMATION
(AEJ022)	ARC 11-747 BA53A B C M F V	20.000	-20.000	-11.700	25.000	SREF 2.4210 53. FT.
(AEJ005)	ARC 11-747 BA53A B C M F V	5.000	-10.000	-11.700	25.000	LREF 14.2140 IN.
(AEJ004)	ARC 11-747 BA53A B C M F V	5.000	-10.000	-11.700	25.000	BREF 28.1004 IN.
(AEJ021)	ARC 11-747 BA53A B C M F V	10.000	-10.000	-11.700	25.000	XPRP 32.3010 IN.
						YPRP .0000 IN.
						ZPRP 11.2500 IN.
						SCALE .0300

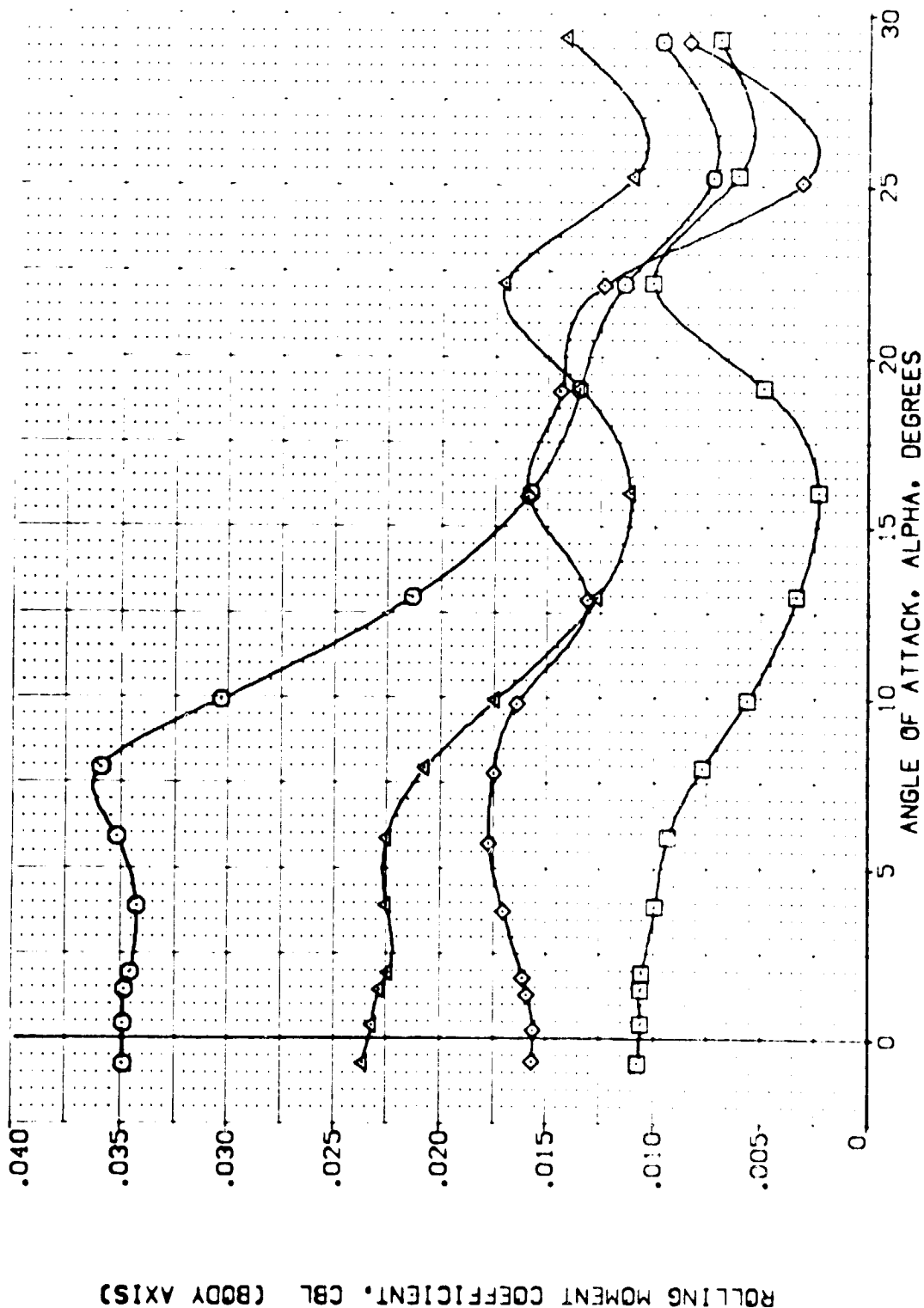


FIG. 17 AILERON EFFECTS

(B)MAC = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	AILERON	ELEVON	BOFLAP	SPOILER	REFERENCE INFORMATION
[AEJ002]	ARC 11-747 0A53A B C M F V	20.000	-20.000	-11.700	25.000	SREF 2.4210 SQ. FT.
[AEJ005]	ARC 11-747 0A53A B C M F V	5.000	-10.000	-11.700	25.000	LREF 14.2440 IN.
[AEJ004]	ARC 11-747 0A53A B C M F V	5.000	.000	-11.700	25.000	BREF 28.1004 IN.
[AEJ001]	ARC 11-747 0A53A B C M F V	10.000	-10.000	-11.700	25.000	XREF 32.3010 IN.
						YREF 11.2500 IN.
						ZREF .0300 IN.
						SCALE

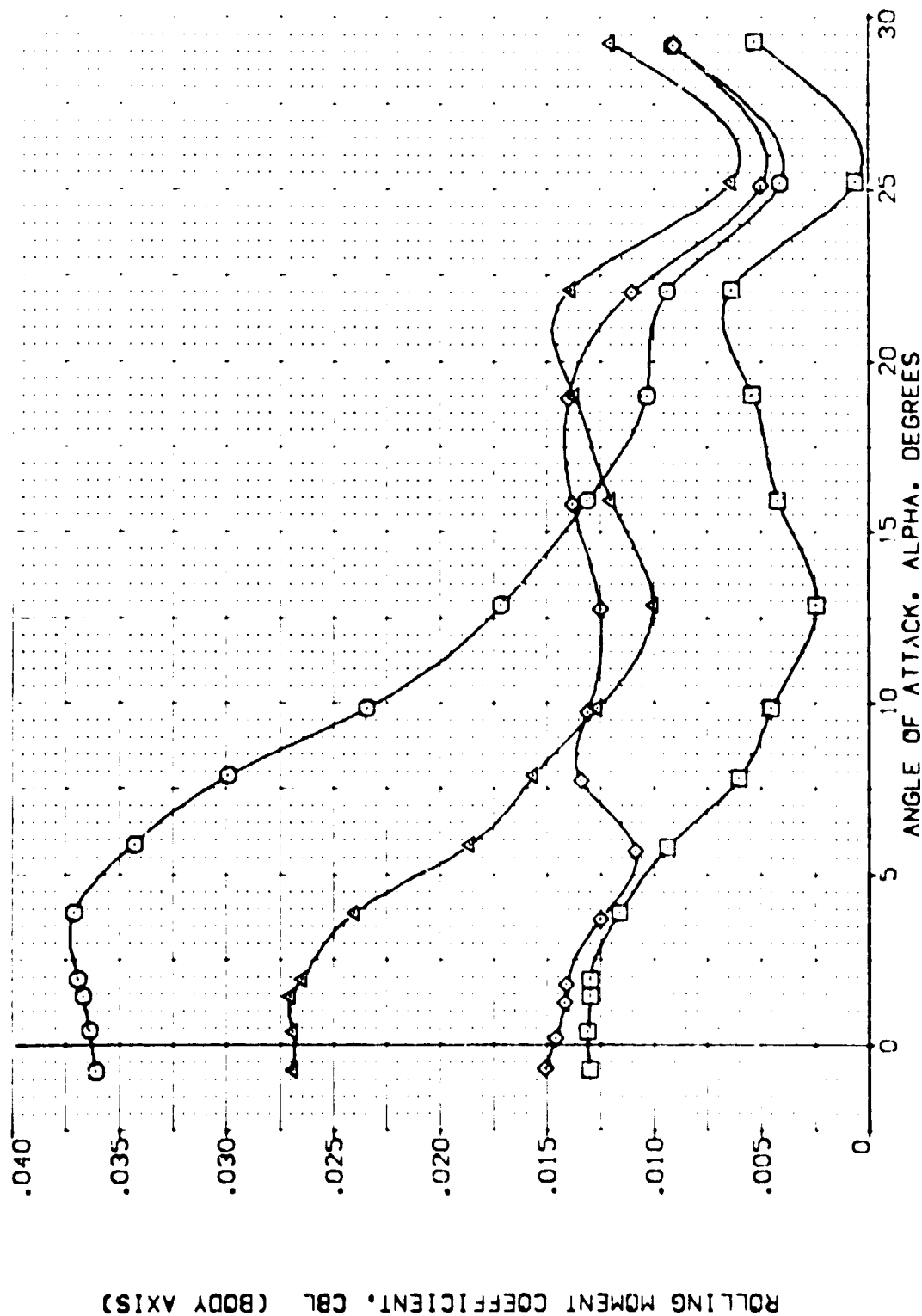


FIG. 17 AILERON EFFECTS

(C)MAC = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	AILERON	ELEVON	BOFLAP	SPDRBY	REFERENCE INFORMATION
{AE4022}	ARC 11-747 DA53A B C M F V1	20.000	-20.000	-11.700	25.000	SREF 2.4210 50.FT.
{AE4005}	ARC 11-747 DA53A B C M F V1	5.000	-10.000	-11.700	25.000	LREF 14.2440 IN.
{AE4004}	ARC 11-747 DA53A B C M F V1	10.000	-10.000	-11.700	25.000	BREF 28.1004 IN.
{AE4021}	ARC 11-747 DA53A B C M F V1		-10.000	-11.700	25.000	XMRP 32.3010 IN.
						YMRP 11.0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

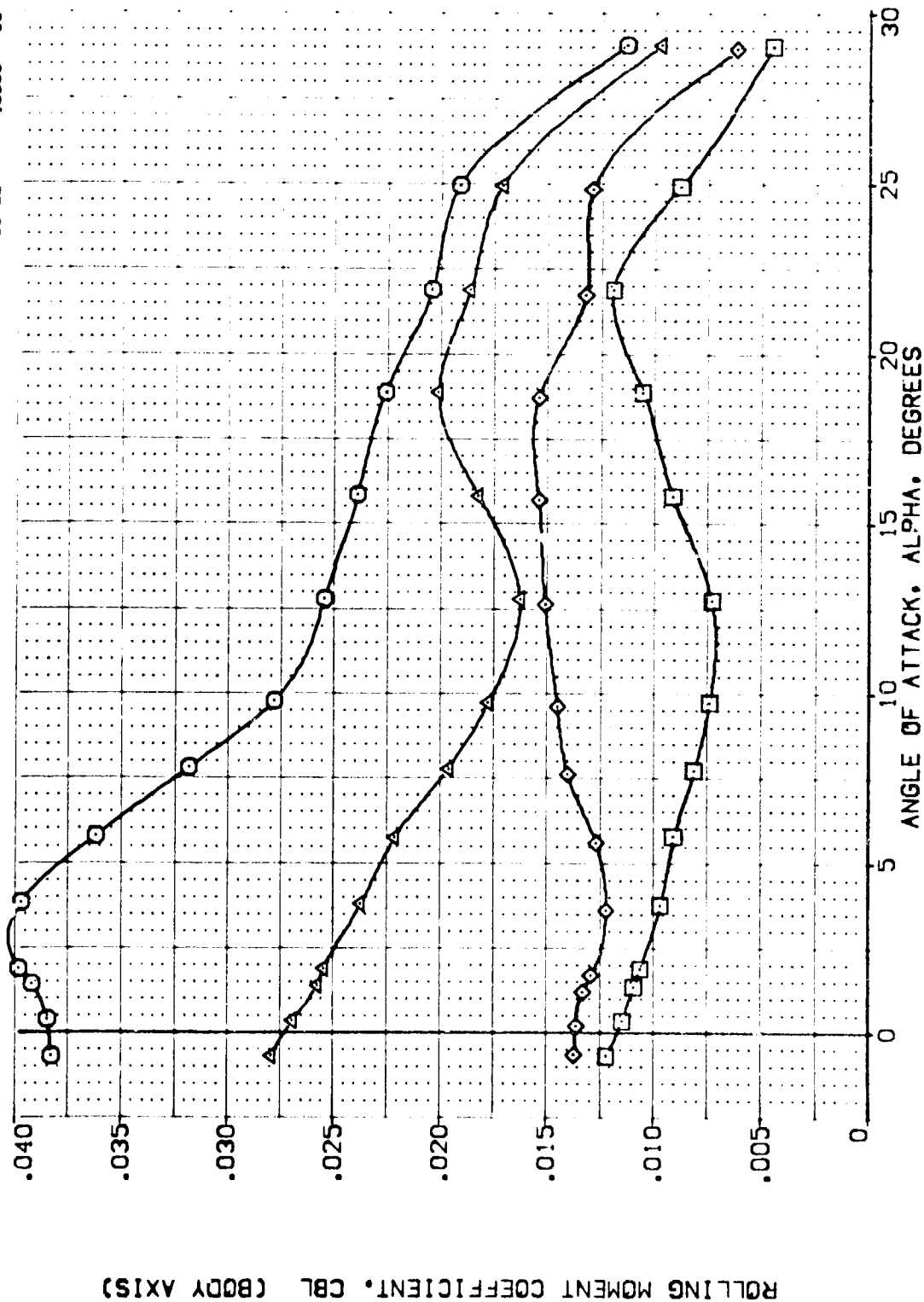


FIG. 17 AILERON EFFECTS

(M)MACH = 1.05

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	AILRON	ELEVON	BOFLAP	SPODBK	REFERENCE INFORMATION
(AEJ022)	○	ARC 11-747 DA53A B C H F V1 V	20.000	-20.000	-11.700	25.000	SREF 2.4210 50.FT.
(AEJ005)	○	ARC 11-747 DA53A B C H F V1 V	5.000	-10.000	-11.700	25.000	LREF 14.2440 IN.
(AEJ004)	○	ARC 11-747 DA53A B C H F V1 V	5.000	-10.000	-11.700	25.000	BREF 28.1004 IN.
(AEJ021)	○	ARC 11-747 DA53A B C H F V1 V	10.000	-10.000	-11.700	25.000	XMRP 32.3010 IN.
							YMRP 11.7500 IN.
							ZMRP 11.7500 IN.
							SCALE .0300

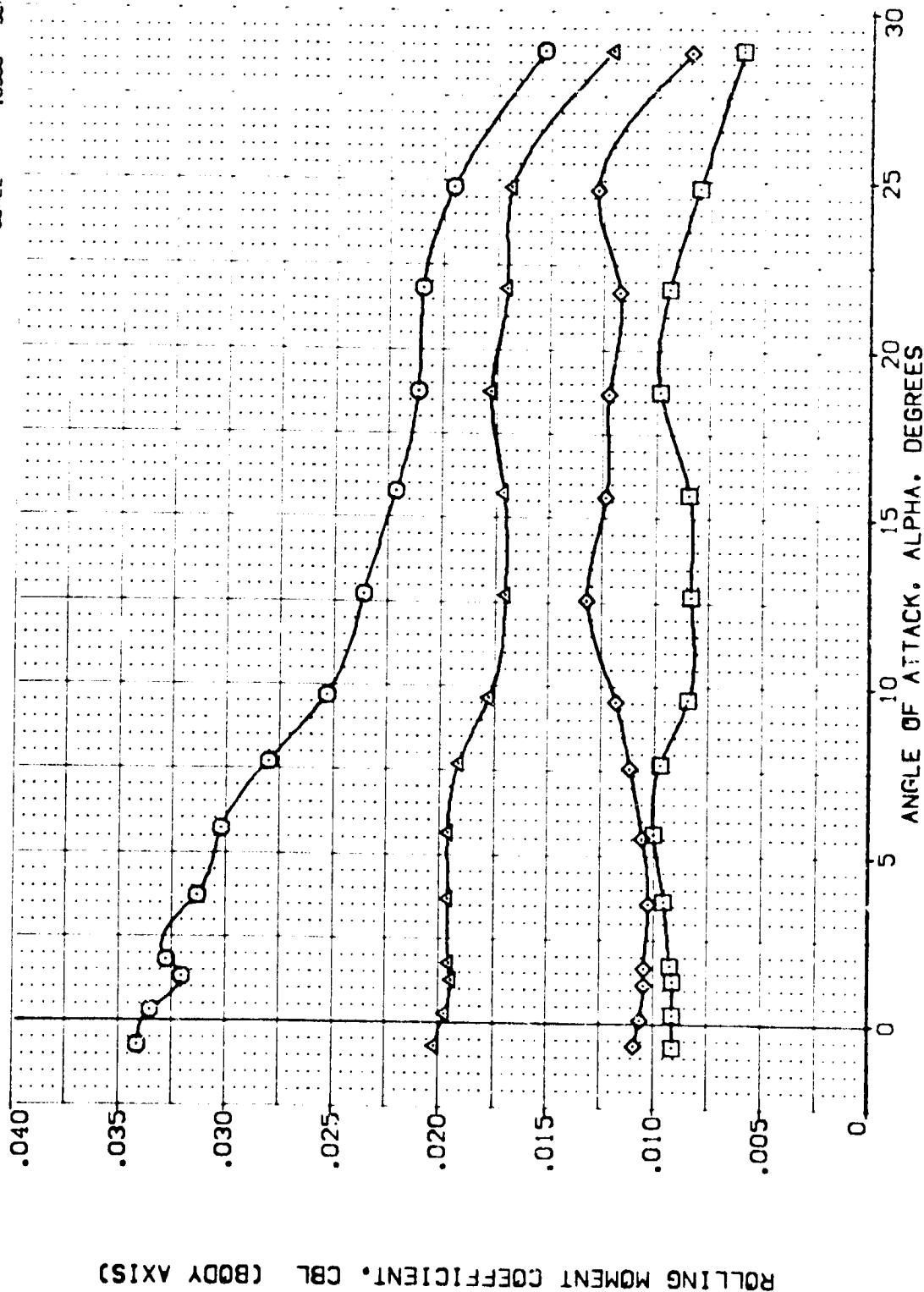


FIG. 17 AILERON EFFECTS

(C)MACH = 1.20

DATA SET SYMBOL CONFIGURATION DESCRIPTION

DATA SET SYMBOL	CONFIGURATION	DESCRIPTION	DA	ELEVON	BOFLAP	SPDBRK	REFERENCE INFORMATION
{VEJ022}	ARC 11-747 DA53A B C M F VI V	NOM: RV/L	20.000	-20.000	-11.700	25.000	SREF 2.4210 SQ.FT.
{VEJ005}	ARC 11-747 DA53A B C M F VI V	NOM: RV/L	5.000	-10.000	-11.700	25.000	LREF 14.2440 IN.
{VEJ004}	ARC 11-747 DA53A B C M F VI V	NOM: RV/L	5.000	0.000	-11.700	25.000	BREF 28.1004 IN.
{VEJ021}	ARC 11-747 DA53A B C M F VI V	NOM: RV/L	10.000	-10.000	-11.700	25.000	XMRP 32.3010 IN.
							YMRP 0.0000 IN.
							ZMRP 11.2500 IN.
							SCALE .0300

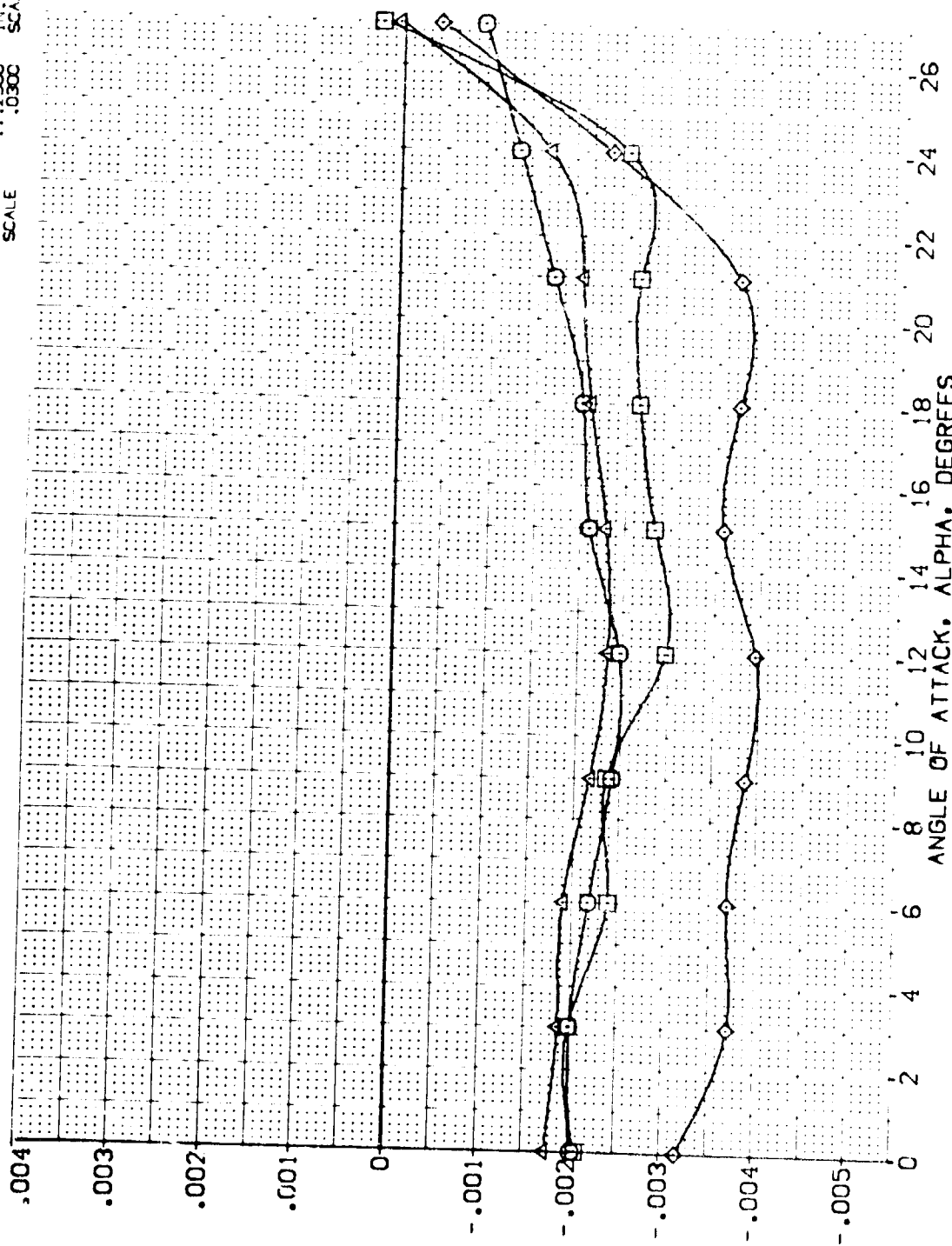


FIG. 18 AILERON EFFECTIVENESS DERIVATIVES

(A) MACH = .60

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	DA	ELEVON	BOFLAP	SPDRBK	REFERENCE INFORMATION
{VEJ022}	□	ARC 11-747 OA53A B C M F V I V	20.000	-20.000	-11.700	25.000	SREF 2.4210 SQ.FT.
{VEJ005}	○	ARC 11-747 OA53A B C M F V I V	5.000	-10.000	-11.700	25.000	LREF 14.2440 IN.
{VEJ004}	△	ARC 11-747 OA53A B C M F V I V	5.000	-10.000	-11.700	25.000	BREF 28.1004 IN.
{VEJ021}	◇	ARC 11-747 OA53A B C M F V I V	10.000	-10.000	-11.700	25.000	XMRP 32.3010 IN.
							YMRP .0000 IN.
							ZMRP 11.2500 IN.
							SCALE .0300

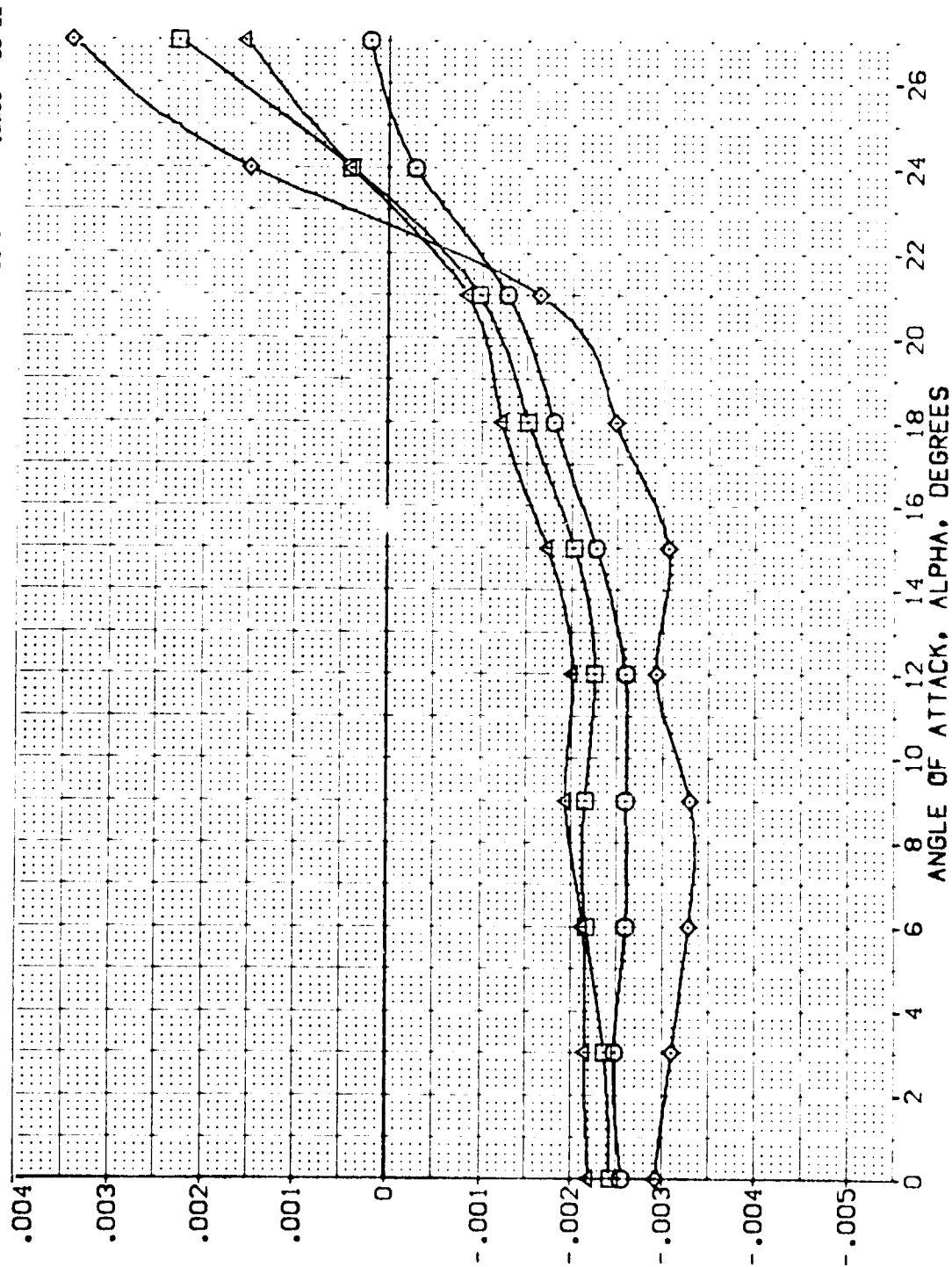


FIG. 18 AILERON EFFECTIVENESS DERIVATIVES

(B) MACH = .80



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DA	ELEVON	BOFLAP	SPDRK	REFERENCE INFORMATION
[VEJ022]	ARC 11-747 OAS3A B C M F VI V	20.000	-20.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[VEJ005]	ARC 11-747 OAS3A B C M F VI V	5.000	-10.000	-11.700	25.000	LREF 14.2440 IN.
[VEJ004]	ARC 11-747 OAS3A B C M F VI V	5.000	-10.000	-11.700	25.000	BREF 28.1004 IN.
[VEJ021]	ARC 11-747 OAS3A B C M F VI V	10.000	-10.000	-11.700	25.000	XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

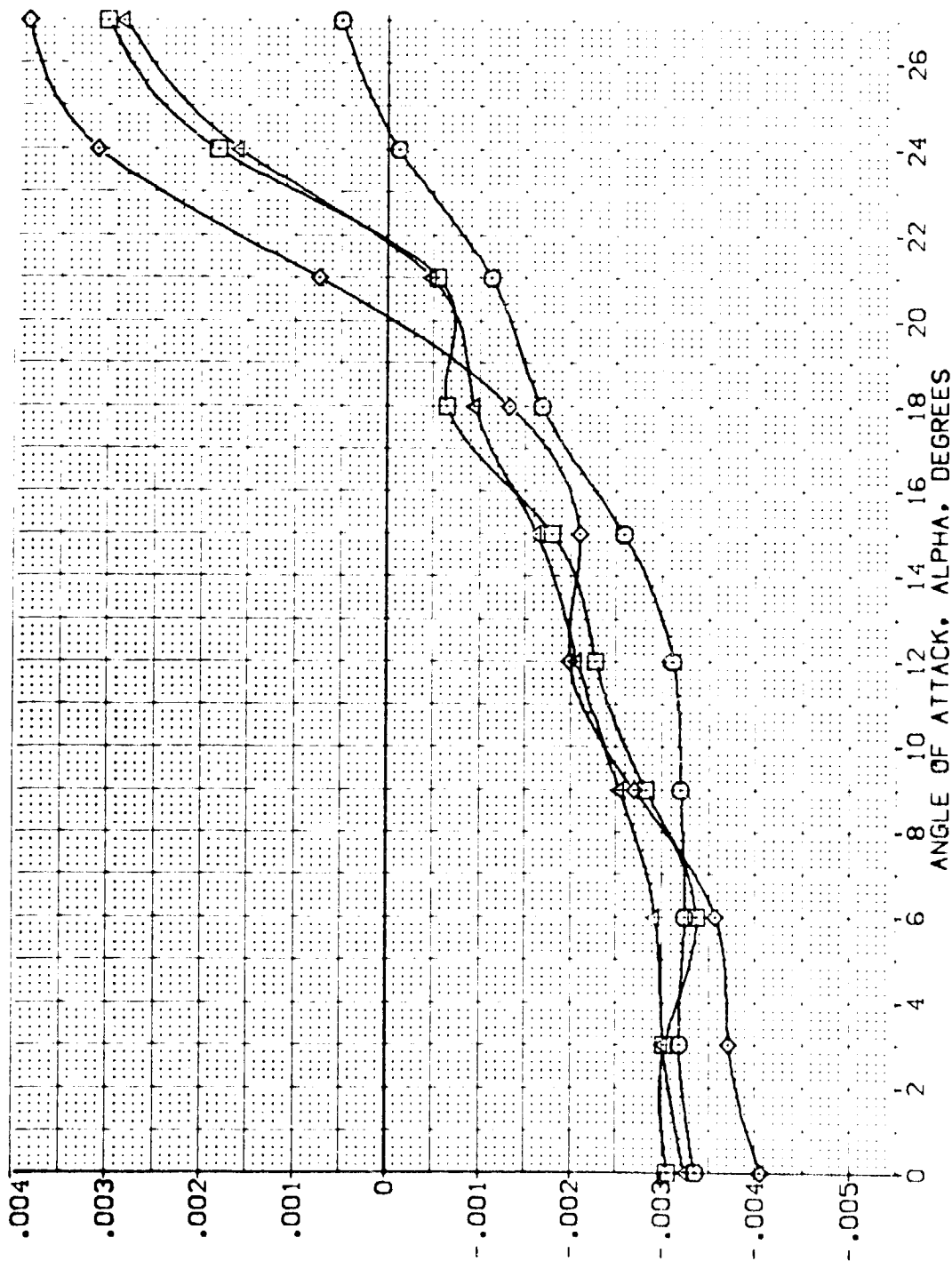


FIG. 18 AILERON EFFECTIVENESS DERIVATIVES

(C)MACH = .30

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DA	ELEVON	BOFLAP	SPDRBK	REFERENCE INFORMATION
(VEJ002)	ARC 11-747 PAS3A B C M F V1	20.000	-20.000	-11.700	25.000	SREF 2.4210 50.FT.
(VEJ005)	ARC 11-747 PAS3A B C M F V1	5.000	-10.000	-11.700	25.000	LREF 14.2440
(VEJ004)	ARC 11-747 PAS3A B C M F V1	10.000	-10.000	-11.700	25.000	BREF 28.1004
(VEJ001)	ARC 11-747 PAS3A B C M F V1	10.000	-10.000	-11.700	25.000	XMRP 32.3010
						YMRP .0000
						ZMRP 11.2500
						SCALE .0300

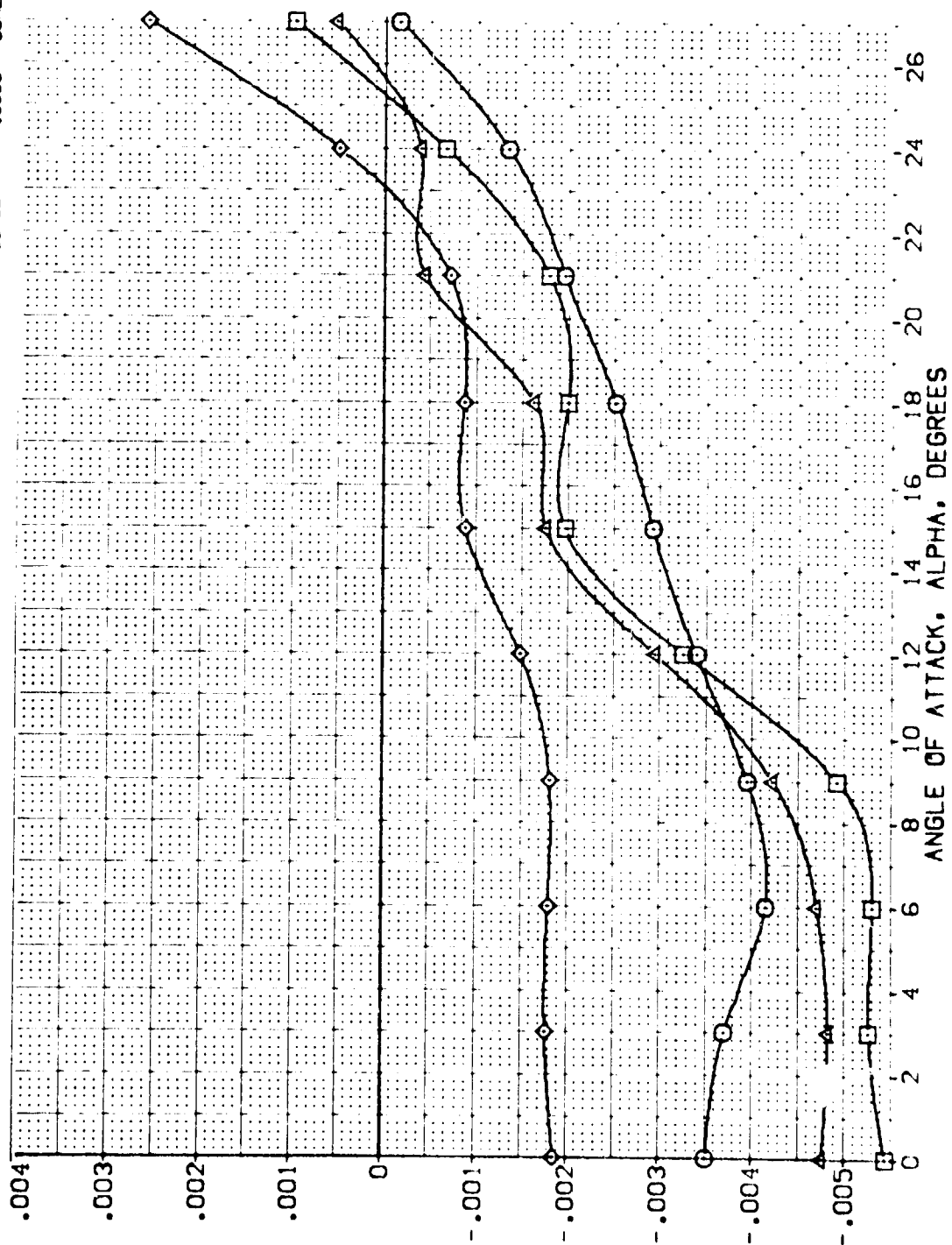
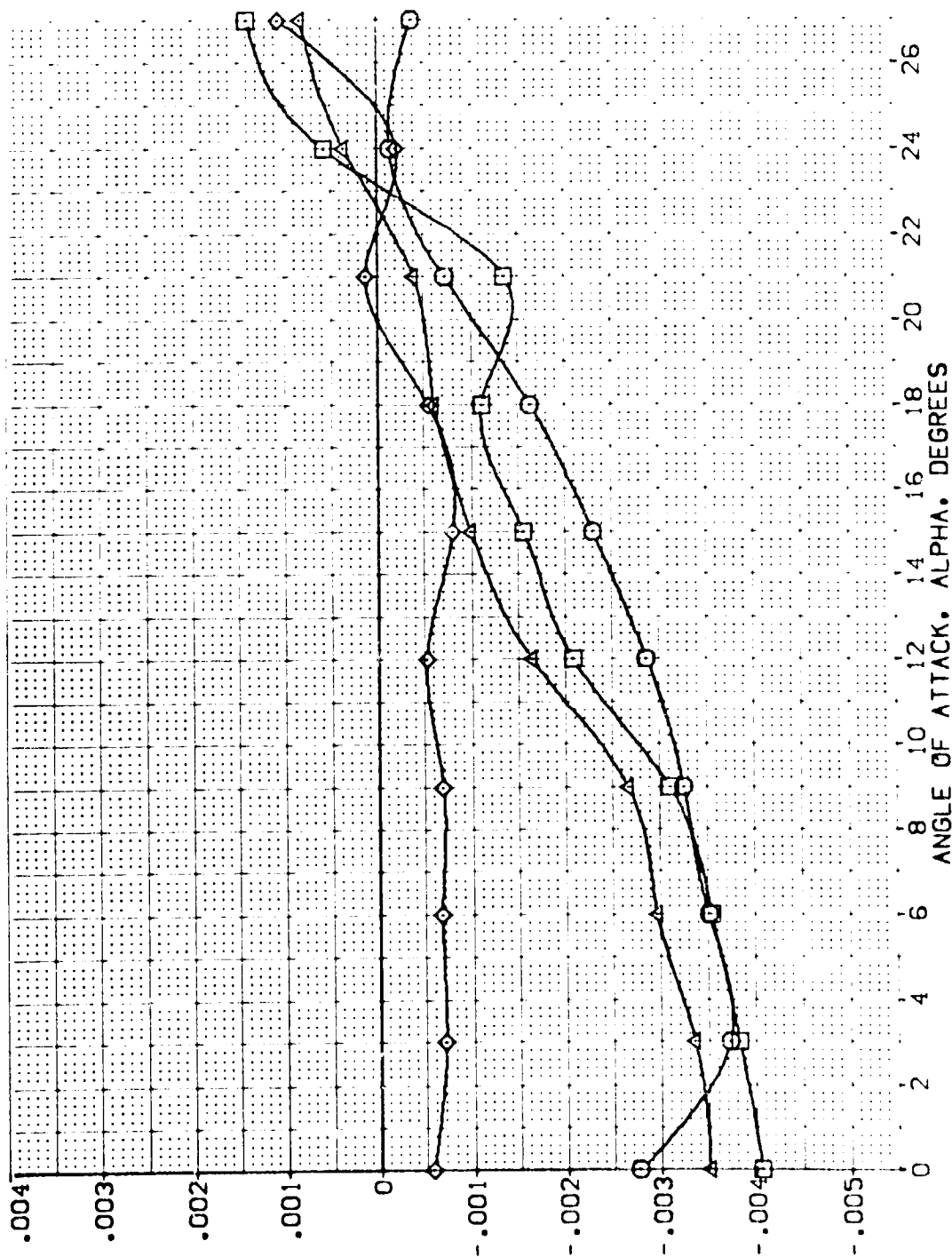


FIG. 18 AILERON EFFECTIVENESS DERIVATIVES

(COMACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DA	ELEVON	BDF LAP	SPORBK	REFERENCE INFORMATION
(VEJ022)	ARC 11-747 DA53A B C M F V1 V	20.000	-20.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(VEJ005)	ARC 11-747 DA53A B C M F V1 V	5.000	-10.000	-11.700	25.000	UREF 14.2140
(VEJ004)	ARC 11-747 DA53A B C M F V1 V	10.000	-10.000	-11.700	25.000	BREF 28.1004
(VEJ021)	ARC 11-747 DA53A B C M F V1 V					XMRP 32.3010
						YMRP .0000
						ZMRP 11.2500
						SCALE .0300



SIDE FORCE DUE TO AILERON, DCY/DA, PER DEGREE

FIG. 18 AILERON EFFECTIVENESS DERIVATIVES

(E)MAC = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DA	ELEVON	BDF LAP	SPDRBK	REFERENCE INFORMATION
(VEJ022)	ARC 11-747 DA53A B C M F VI V	20.000	-20.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(VEJ005)	ARC 11-747 DA53A B C M F VI V	5.000	-10.000	-11.700	25.000	LREF 14.2440 IN.
(VEJ004)	ARC 11-747 DA53A B C M F VI V	5.000	.000	-11.700	25.000	BREF 28.1004 IN.
(VEJ021)	ARC 11-747 DA53A B C M F VI V	10.000	-10.000	-11.700	25.000	XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

YAWING MOMENT DUE TO AILERON, DCYND, PER DEGREE, (BODY AXIS)

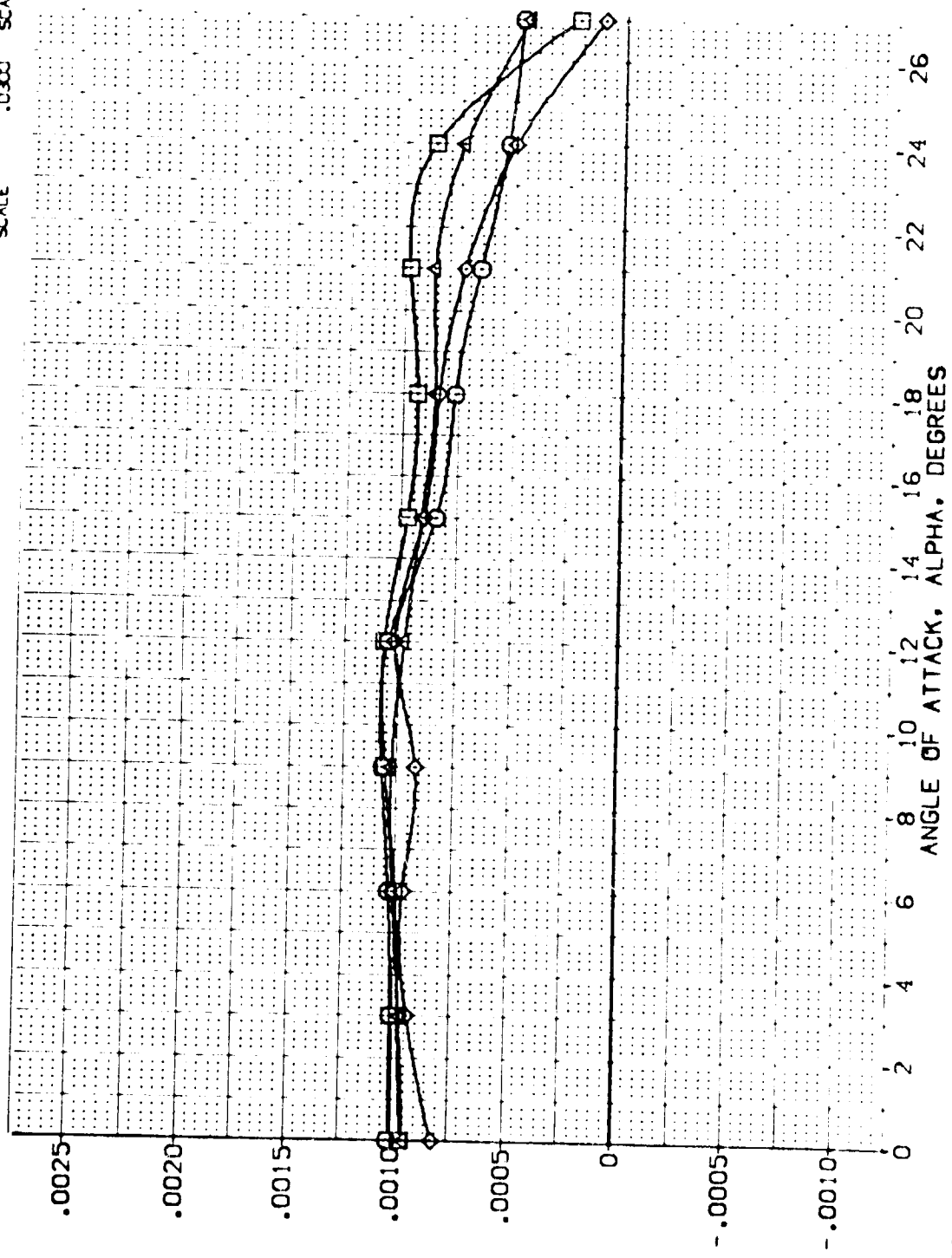


FIG. 18 AILERON EFFECTIVENESS DERIVATIVES

(A)MAC = .60

DATA SET SYMBOL CONFIGURATION DESCRIPTION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DA	ELEVON	BOFLAP	SPDRBK	REFERENCE INFORMATION
[VEJ002]	ARC 11-747 D/S3A B C M F V1 V	20.000	-20.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[VEJ005]	ARC 11-747 D/S3A B C M F V1 V	5.000	-10.000	-11.700	25.000	LREF 14.2440
[VEJ004]	ARC 11-747 D/S3A B C M F V1 V	5.000	-10.000	-11.700	25.000	BREF 28.1004
[VEJ001]	ARC 11-747 D/S3A B C M F V1 V	10.000	-10.000	-11.700	25.000	XMRP 32.3010
						YMRP .0000
						ZMRP 11.7500
						SCALE .0300

YAWING MOMENT DUE TO AILERON, DCYNDA, PER DEGREE, (BODY AXIS)

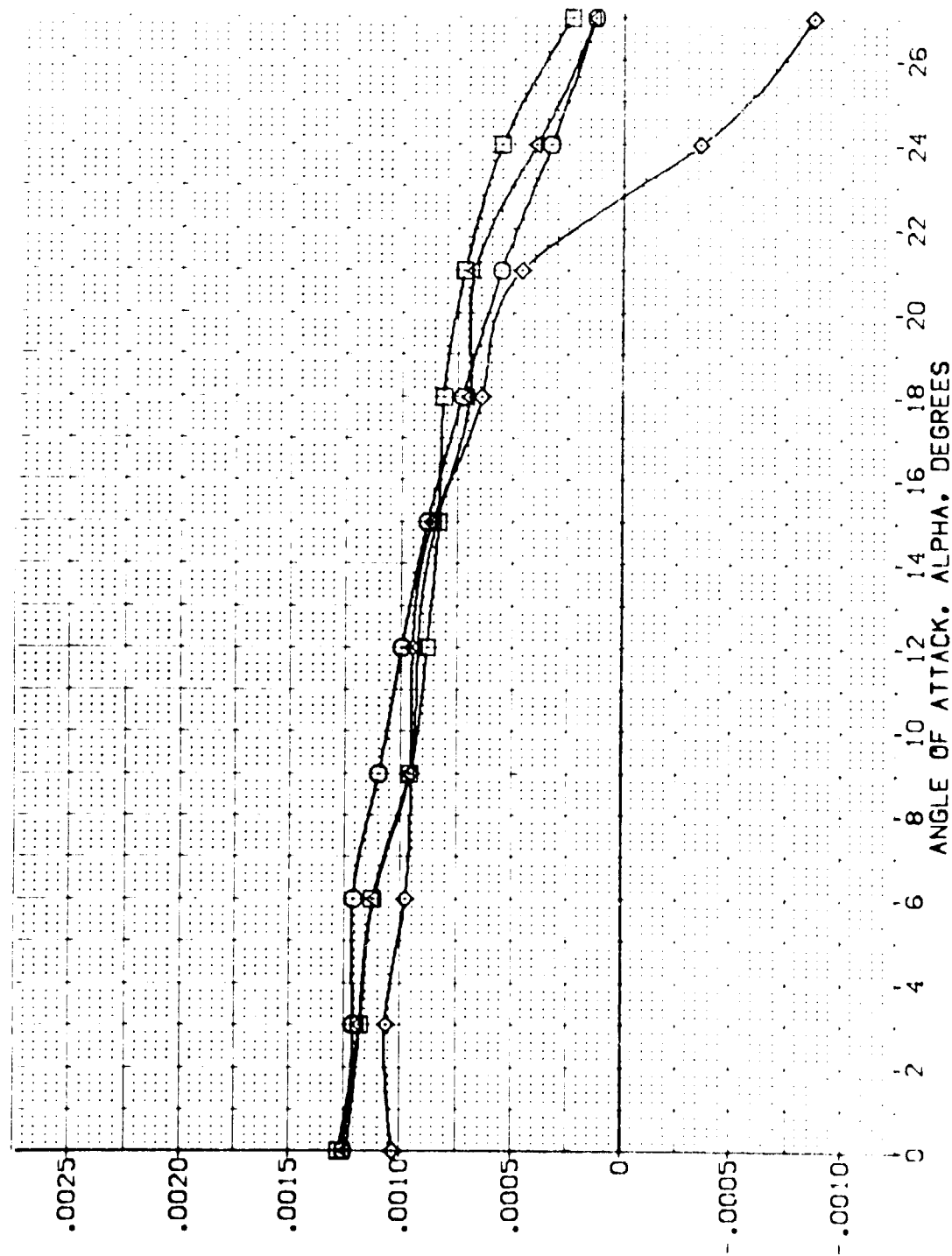


FIG. 18 AILERON EFFECTIVENESS DERIVATIVES

(3)MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DA	ELEVON	BOFLAP	SPDRBK	REFERENCE INFORMATION
[VEJ022]	ARC 11-747 DAS3A B C M F VI	20.000	-20.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[VEJ005]	ARC 11-747 DAS3A B C M F VI	5.000	-10.000	-11.700	25.000	LREF 14.2440
[VEJ004]	ARC 11-747 DAS3A B C M F VI	5.000	0.000	-11.700	25.000	BREF 28.1004
[VEJ021]	ARC 11-747 DAS3A B C M F VI	10.000	-10.000	-11.700	25.000	XREF 32.3010
						YREF 0.0000
						ZREF 11.2500
						SCALE .0300

YAWING MOMENT DUE TO AILERON, DCYMDA, PER DEGREE, (BODY AXIS)

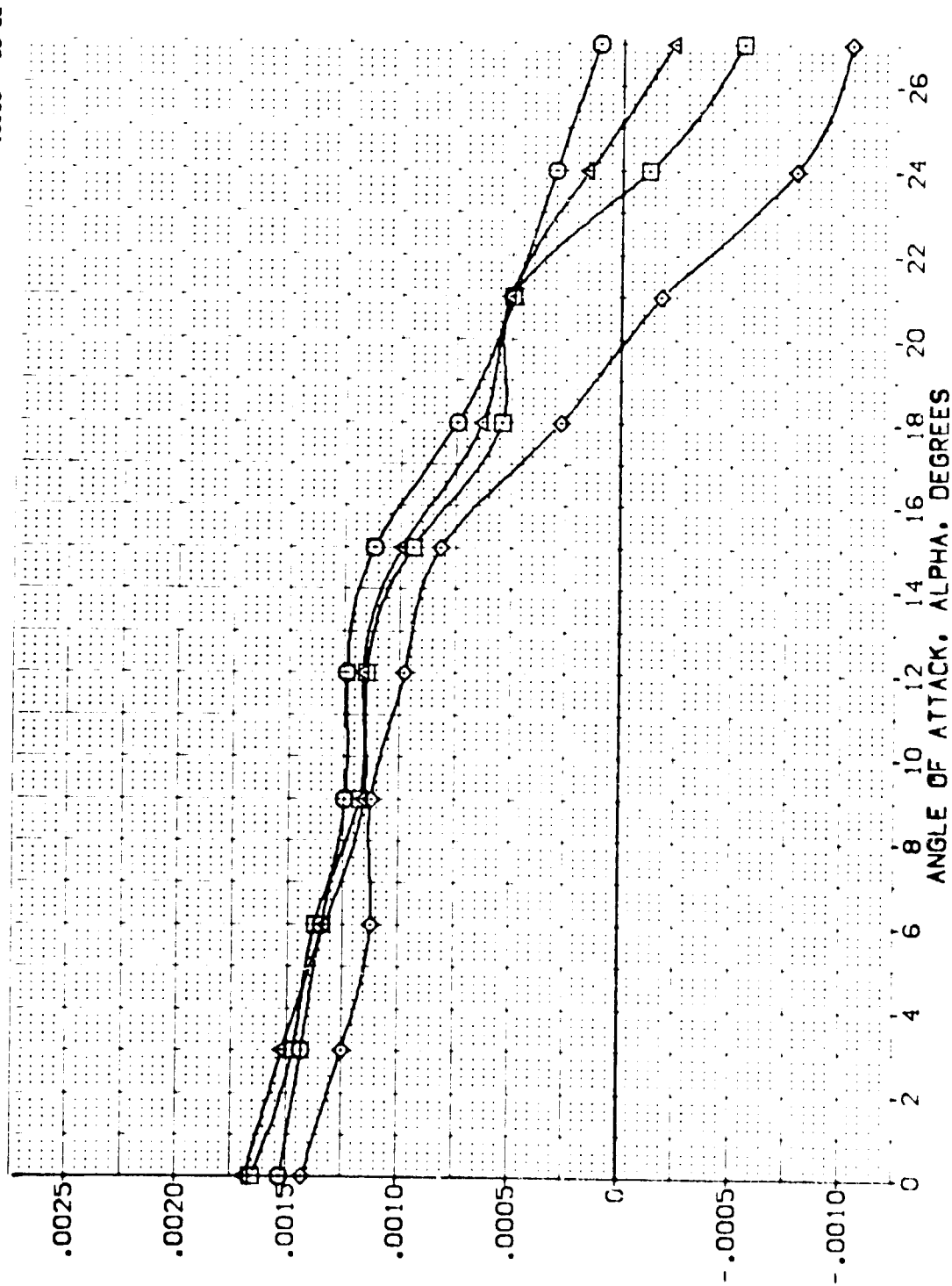


FIG. 18 AILERON EFFECTIVENESS DERIVATIVES

(C)MAC = .90

YAWING MOMENT DUE TOAILERON, DCYNDA, PER DEGREE, (BODY AXIS)

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DA	ELEVON	BOFLAP	SPOBRK	REFERENCE INFORMATION
(VEJ022)	ARC 11-747 CAS3A B C H F V1 V	20.000	-20.000	-11.700	25.000	SREF 2.4210 SC.FT.
(VEJ005)	ARC 11-747 CAS3A B C H F V1 V	5.000	-10.000	-11.700	25.000	LREF 14.2440
(VEJ004)	ARC 11-747 CAS3A B C H F V1 V	5.000	.000	-11.700	25.000	BREF 28.1004
(VEJ001)	ARC 11-747 CAS3A B C H F V1 V	10.000	-10.000	-11.700	25.000	XREF 32.8010
						YREF .0000
						ZREF 11.2500
						SCALE 0.000

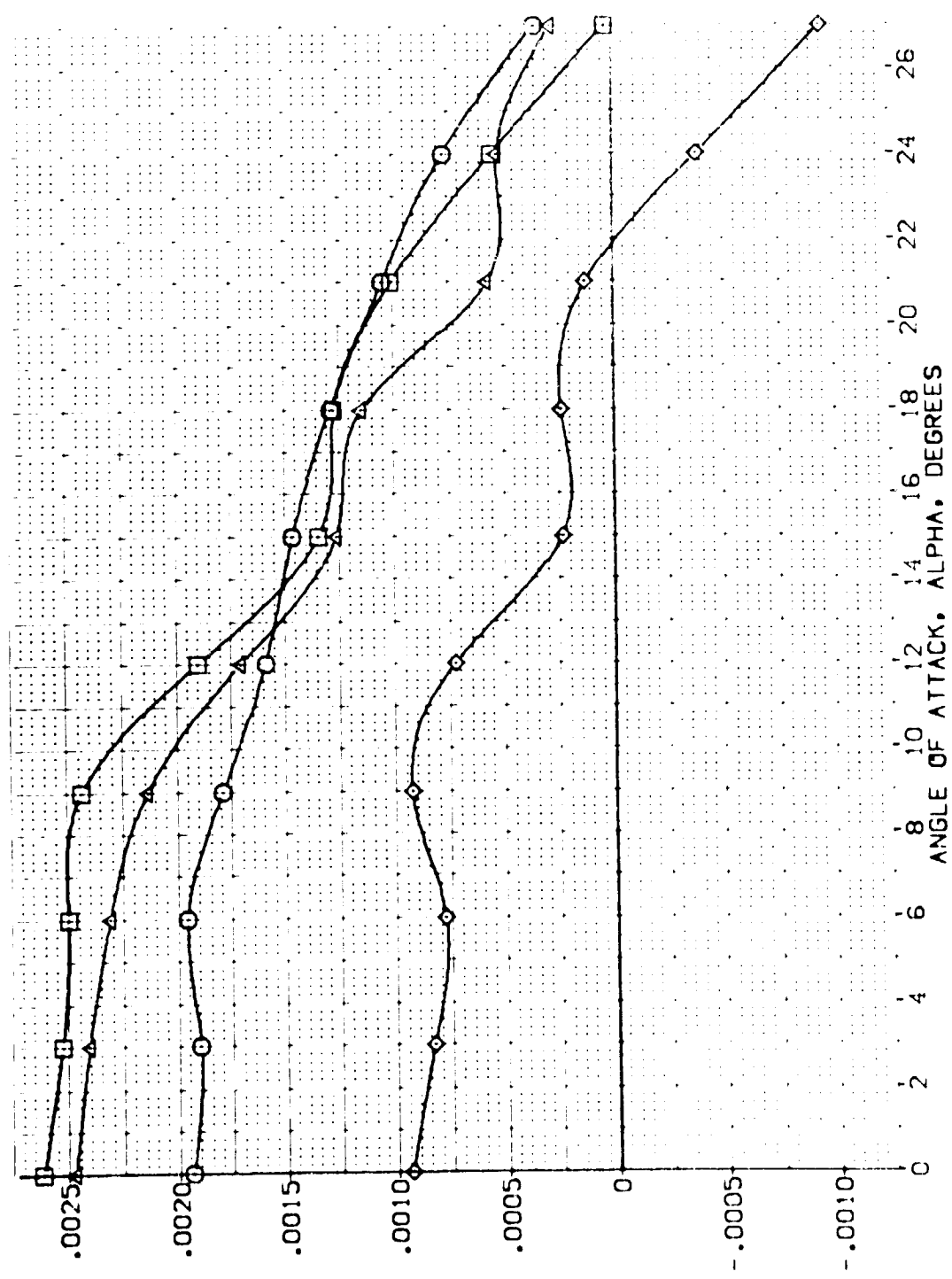


FIG. 18AILERON EFFECTIVENESS DERIVATIVES

(D)MAC+ = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DA	ELEVON	BD FLAP	SPDRM	REFERENCE INFORMATION
[VEJ022]	ARC 11-747 QAS3A B C H F VI V	20.000	-20.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[VEJ005]	ARC 11-747 QAS3A B C H F VI V	5.000	-10.000	-11.700	25.000	LREF 14.2440 IN.
[VEJ004]	ARC 11-747 QAS3A B C H F VI V	5.000	-10.000	-11.700	25.000	BREF 26.1004 IN.
[VEJ021]	ARC 11-747 QAS3A B C H F VI V	10.000	-10.000	-11.700	25.000	XMRD 32.3010 IN.
						YMRD .0000 IN.
						ZMRD 11.2500 IN.
						SCALE .0300

YAWING MOMENT DUE TOAILERON, DCYNDA, PER DEGREE, (BODY AXIS)

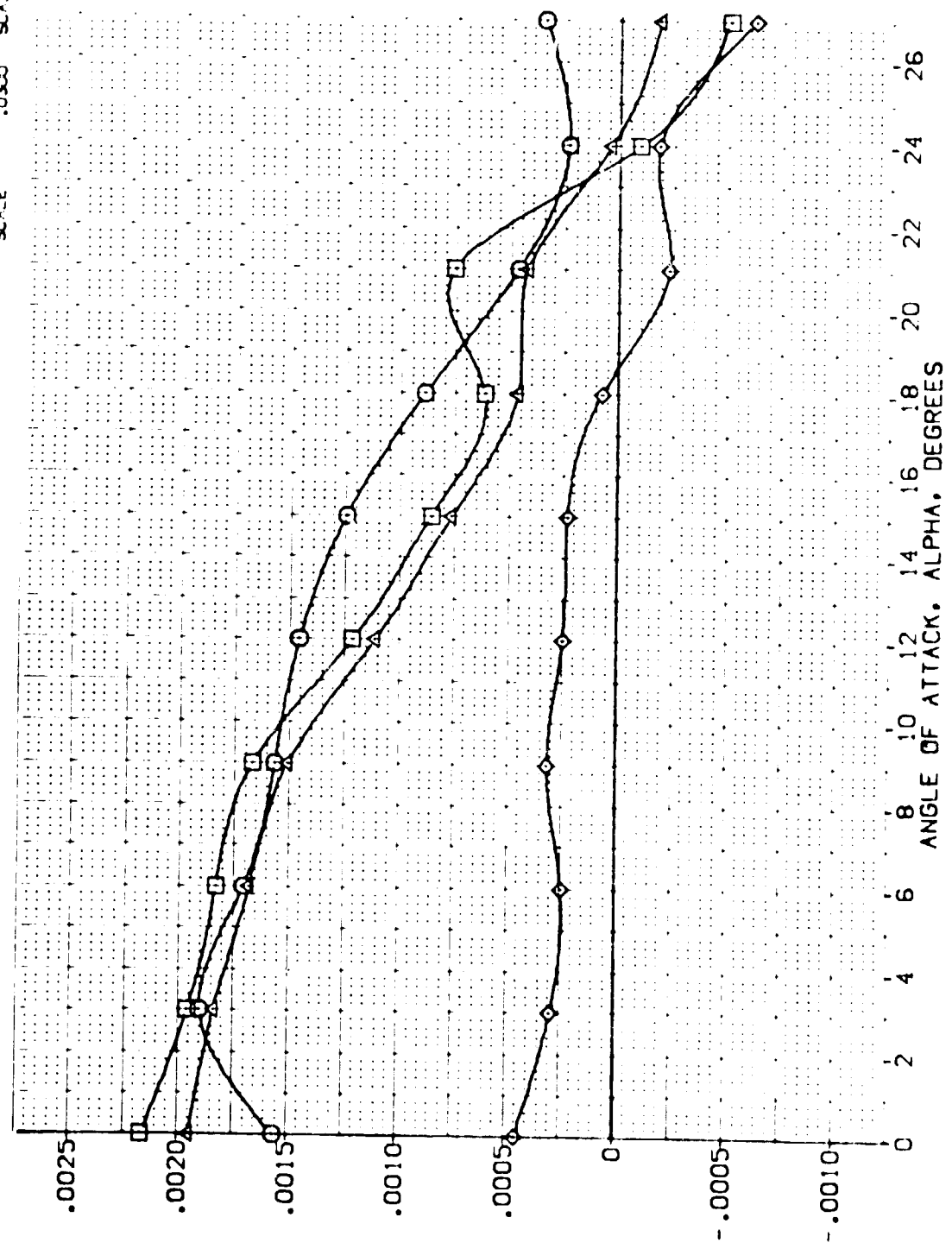


FIG. 18AILERON EFFECTIVENESS DERIVATIVES

(E)MAC= 1.20



DATA SET 5-000 CONFIGURATION DESCRIPTION

REF	DA	ELEVON	BD LAP	SPOBRK	REF	DA	ELEVON	BD LAP	SPOBRK
1	20.000	-20.000	-11.700	25.000	1	20.000	-20.000	-11.700	25.000
2	5.000	-10.000	-11.700	25.000	2	5.000	-10.000	-11.700	25.000
3	5.000	-10.000	-11.700	25.000	3	5.000	-10.000	-11.700	25.000
4	10.000	-10.000	-11.700	25.000	4	10.000	-10.000	-11.700	25.000

REFERENCE INFORMATION

REF	DA	ELEVON	BD LAP	SPOBRK
1	20.000	-20.000	-11.700	25.000
2	5.000	-10.000	-11.700	25.000
3	5.000	-10.000	-11.700	25.000
4	10.000	-10.000	-11.700	25.000

SCALE

REF	DA	ELEVON	BD LAP	SPOBRK
1	20.000	-20.000	-11.700	25.000
2	5.000	-10.000	-11.700	25.000
3	5.000	-10.000	-11.700	25.000
4	10.000	-10.000	-11.700	25.000

ROLLING MOMENT DUE TO AILERON, DCBLDA, PER DEGREE, (BODY AXIS)

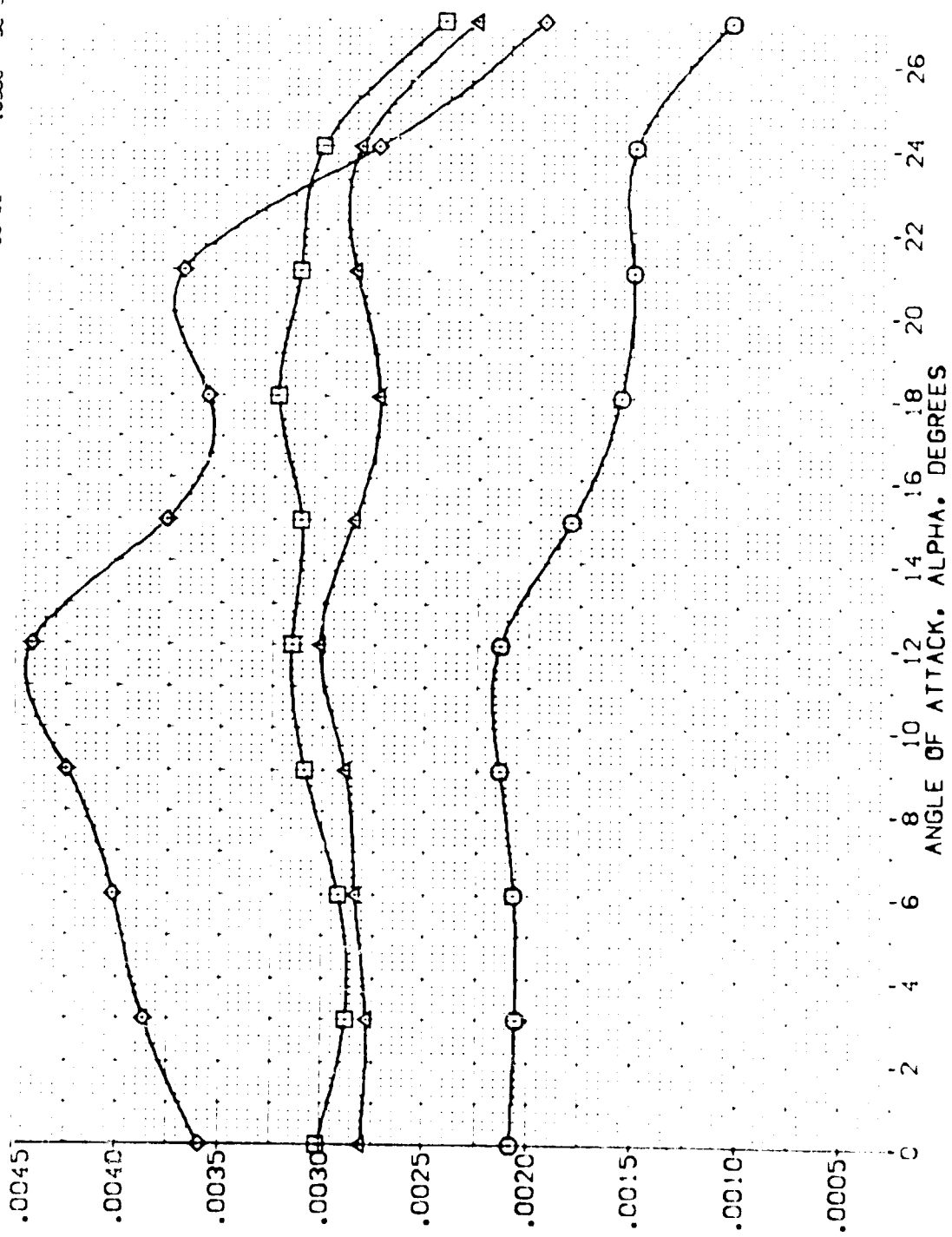


FIG. 18 AILERON EFFECTIVENESS DERIVATIVES

(A) VAC = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DA	ELEVON	BD FLAP	SPDBRK	REFERENCE INFORMATION
(VEJ022)	ARC 11-747 BA53A B C H F VI V	20.000	-20.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(VEJ023)	ARC 11-747 BA53A B C H F VI V	5.000	-10.000	-11.700	25.000	LREF 14.2440 IN.
(VEJ024)	ARC 11-747 BA53A B C H F VI V	5.000	-10.000	-11.700	25.000	BREF 28.1004 IN.
(VEJ021)	ARC 11-747 BA53A B C H F VI V	10.000	-10.000	-11.700	25.000	AMRP 32.3010 IN.
						VMRP 11.2500
						ZMRP .0300 SCALE

ROLLING MOMENT DUE TO AILERON, DCBLDA, PER DEGREE, (BODY AXIS)

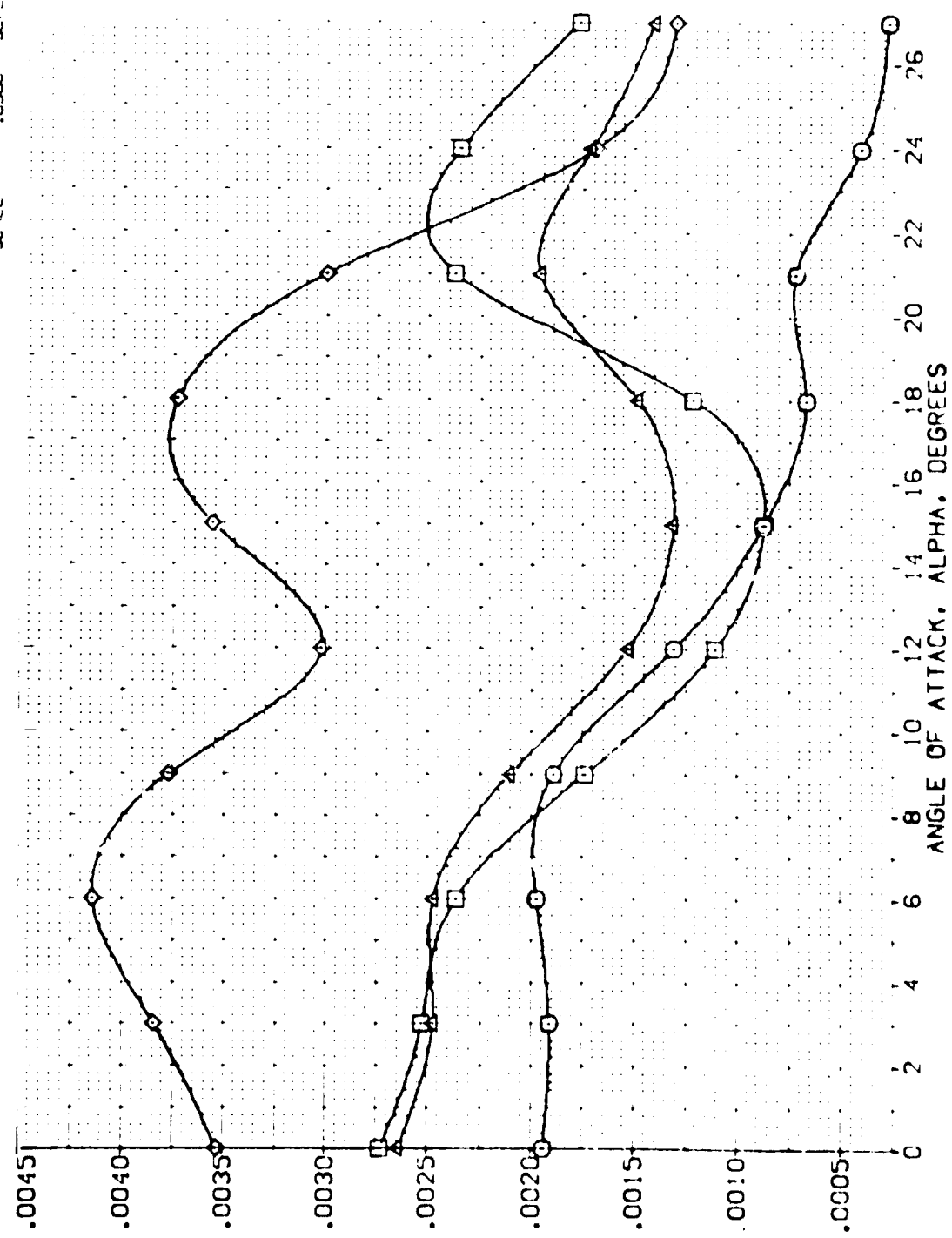


FIG. 18 AILERON EFFECTIVENESS DERIVATIVES

(B)MAC = .80

DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 [VE4022] C ARC -747 OAS3A 3 C M F V V  
 [VE4005] C ARC -747 OAS3A 3 C M F V V  
 [VE4004] C ARC -747 OAS3A 3 C M F V V  
 [VE4021] C ARC -747 OAS3A 3 C M F V V

EA ELEVON BDF LAP SPDRBK  
 20.000 -20.000 -1.700 20.000  
 20.000 -20.000 -1.700 20.000  
 20.000 -20.000 -1.700 20.000  
 20.000 -20.000 -1.700 20.000

REFERENCE INFORMATION  
 SREF 2.4210 SQ.FT.  
 LREF 14.2710  
 BREF 28.1000  
 XREF 32.3010  
 YREF 11.7500  
 ZREF 11.7500  
 SCALE .0300

ROLLING MOMENT DUE TO AILERON, DCBLDA, PER DEGREE, (BODY AXIS)

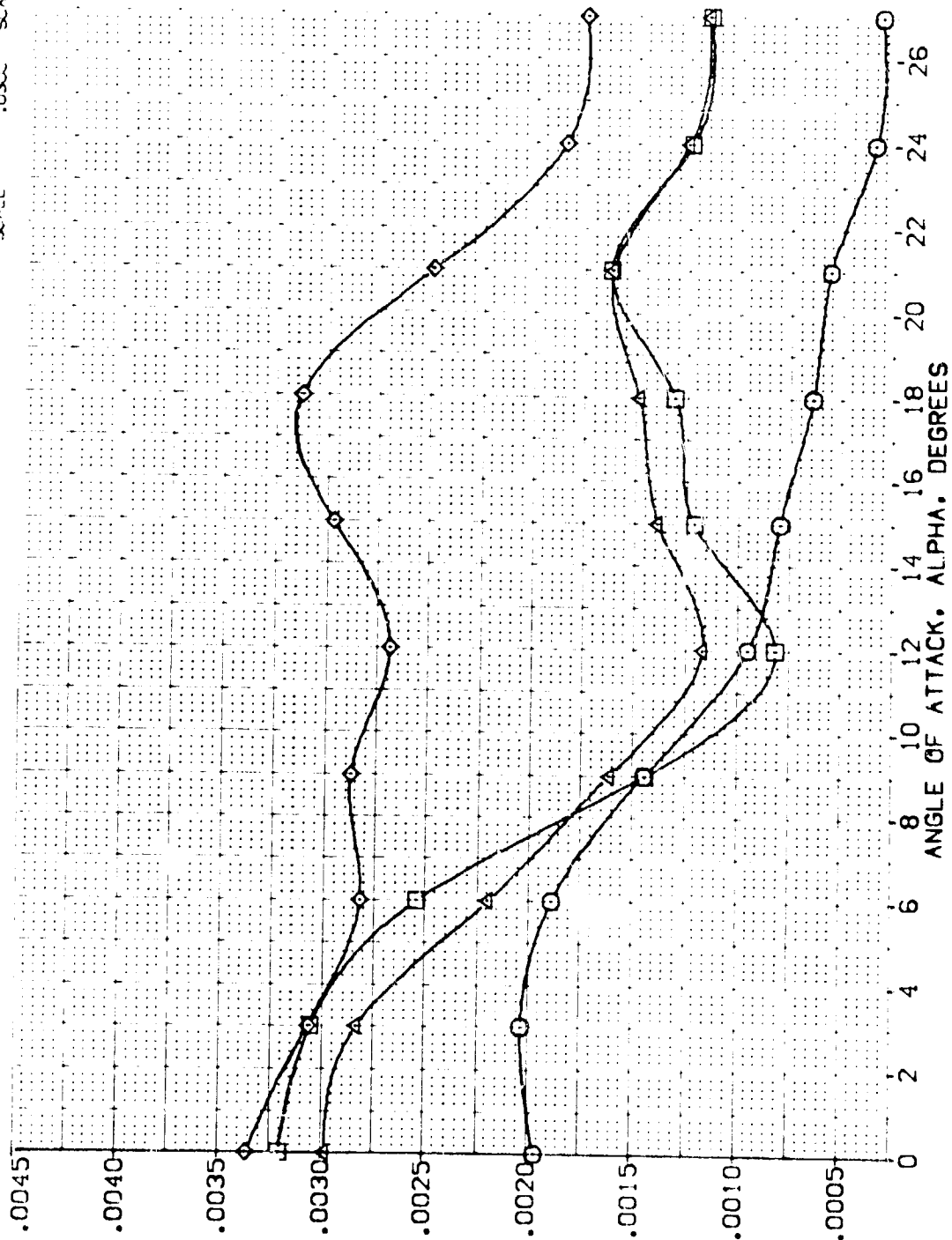


FIG. 18 AILERON EFFECTIVENESS DERIVATIVES

(C)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DA	ELEVON	BDF LAP	SPTRBK	REFERENCE INFORMATION
[VEJ022]	ARC 11-747 OAS3A B C M F VI V	20.000	-20.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[VEJ005]	ARC 11-747 OAS3A B C M F VI V	5.000	-10.000	-11.700	25.000	LREF 14.2440 IN.
[VEJ004]	ARC 11-747 OAS3A B C M F VI V	5.000	.000	-11.700	25.000	BREF 28.1004 IN.
[VEJ021]	ARC 11-747 OAS3A B C M F VI V	10.000	-10.000	-11.700	25.000	XMRP 72.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

ROLLING MOMENT DUE TO AILERON, DCBLDA, PER DEGREE, (BODY AXIS)

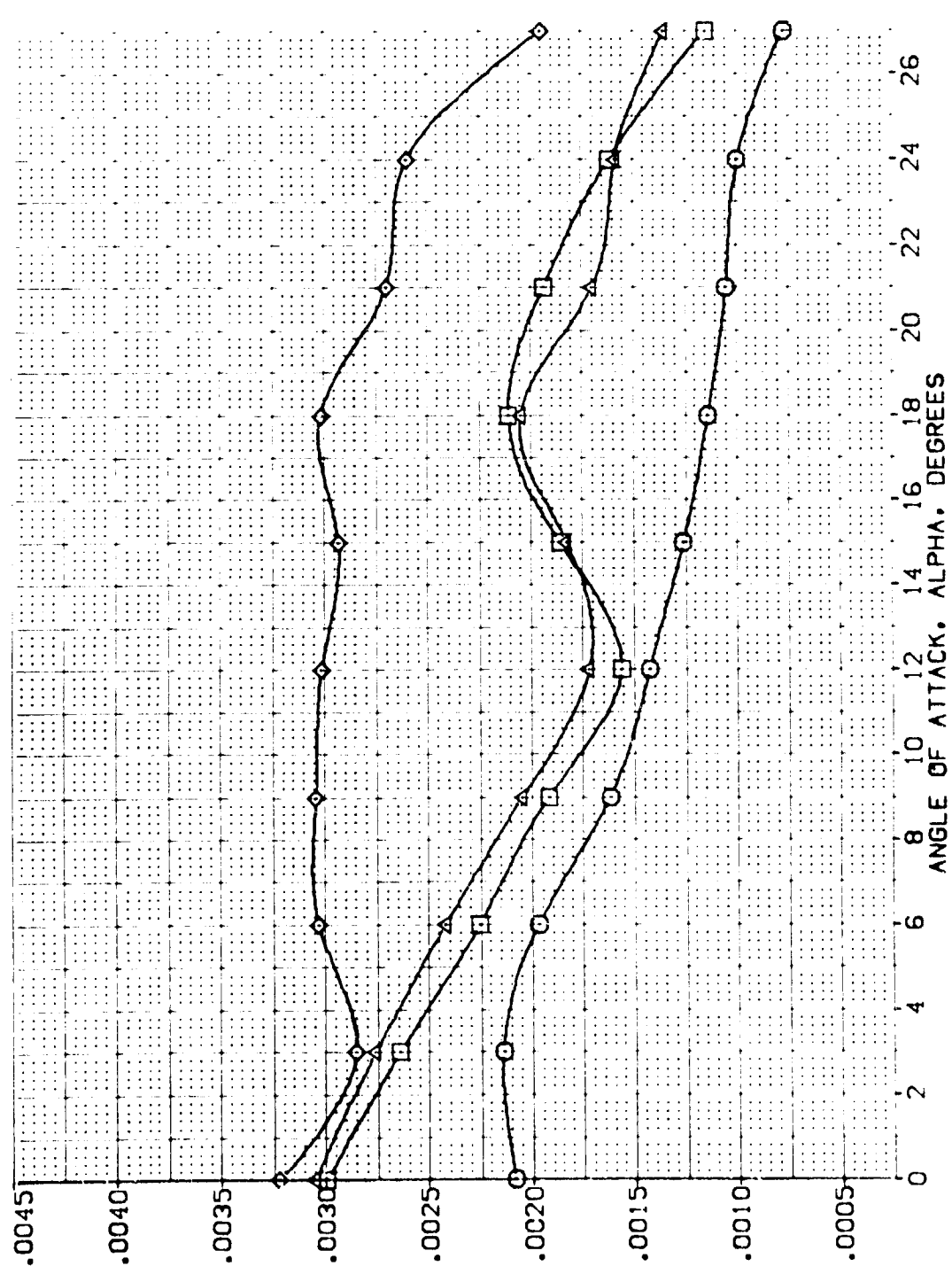


FIG. 18 AILERON EFFECTIVENESS DERIVATIVES

(O) MACH = 1.05



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DA	ELEVON	BOFLAP	SPDBRK	REFERENCE INFORMATION
{VEJ022}	ARC 11-747 QAS3A B C H F VI	20.000	-20.000	-11.700	25.000	SREF 2.4210 SQ.FT.
{VEJ005}	ARC 11-747 QAS3A B C H F VI	5.000	-10.000	-11.700	25.000	LREF 13.2440 IN.
{VEJ004}	ARC 11-747 QAS3A B C H F VI	5.000	-10.000	-11.700	25.000	BREF 28.1004 IN.
{VEJ021}	ARC 11-747 QAS3A B C H F VI	10.000	-10.000	-11.700	25.000	XMRP 32.3010 IN.
						YMRP 0.0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300 SCALE

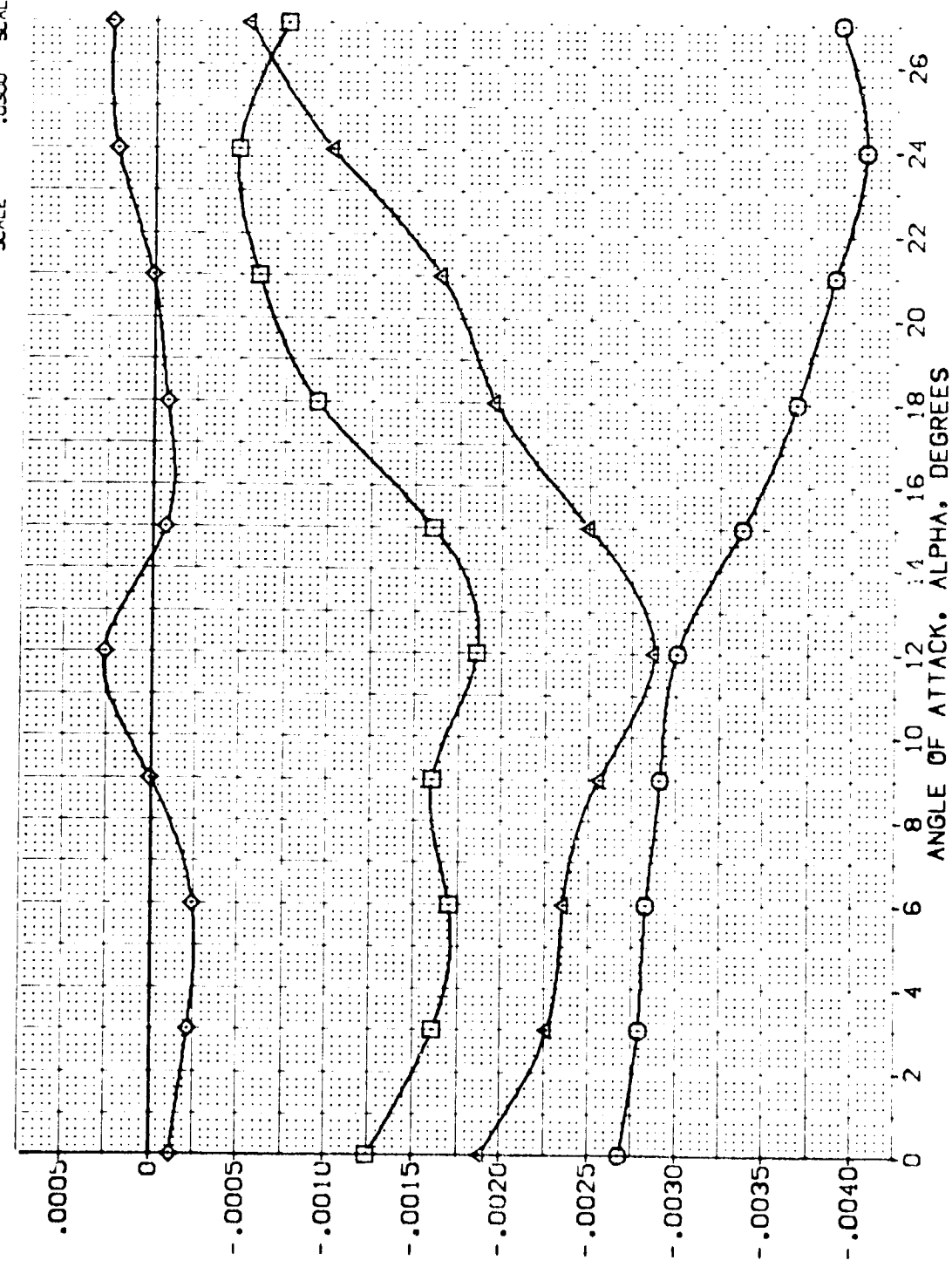


FIG. 18AILERON EFFECTIVENESS DERIVATIVES

(A)MACH = .60

PITCHING MOMENT COEFF. DERIV. WRT AILERON DEFL., DCLMDA, PER DEG

DATA SET SYMBOL DESCRIPTION  
 [VEJ022] Q  
 [VEJ005] K  
 [VEJ004] K  
 [VEJ001] K

ARC 11-747 BA53A B C M F V  
 ARC 11-747 BA53A B C M F V  
 ARC 11-747 BA53A B C M F V  
 ARC 11-747 BA53A B C M F V

DA 20.000  
 5.000  
 5.000  
 10.000

ELEVON -20.000  
 -10.000  
 -10.000  
 -10.000

BDF LAP -11.700  
 -11.700  
 -11.700  
 -11.700

SPOBRK 25.000  
 25.000  
 25.000  
 25.000

REFERENCE INFORMATION  
 SREF 2.4210 SQ.FT.  
 LREF 14.2440 IN.  
 BREF 28.1004 IN.  
 XMRG 37.3010 IN.  
 YMRG 11.2500 IN.  
 ZMRG 11.2500 IN.  
 SCALE .0300

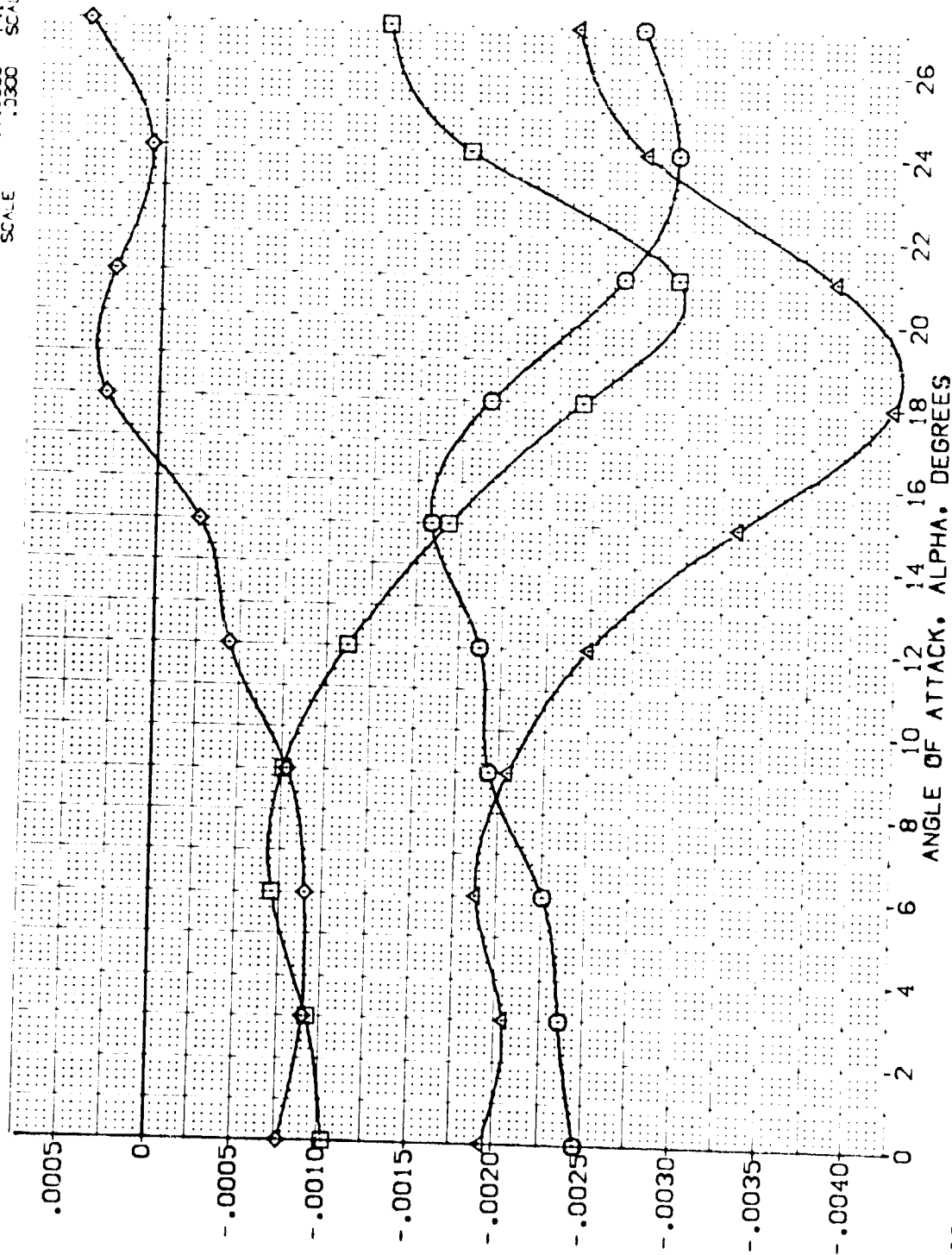


FIG. 18 AILERON EFFECTIVENESS DERIVATIVES

(B)MACH = .80

DATA SET SYMBOL	CONFIGURATION	DESCRIPTION
ARC 11-747 0A53A	B C M F V1	
ARC 11-747 0A53A	B C M F V1	
ARC 11-747 0A53A	B C M F V1	
ARC 11-747 0A53A	B C M F V1	

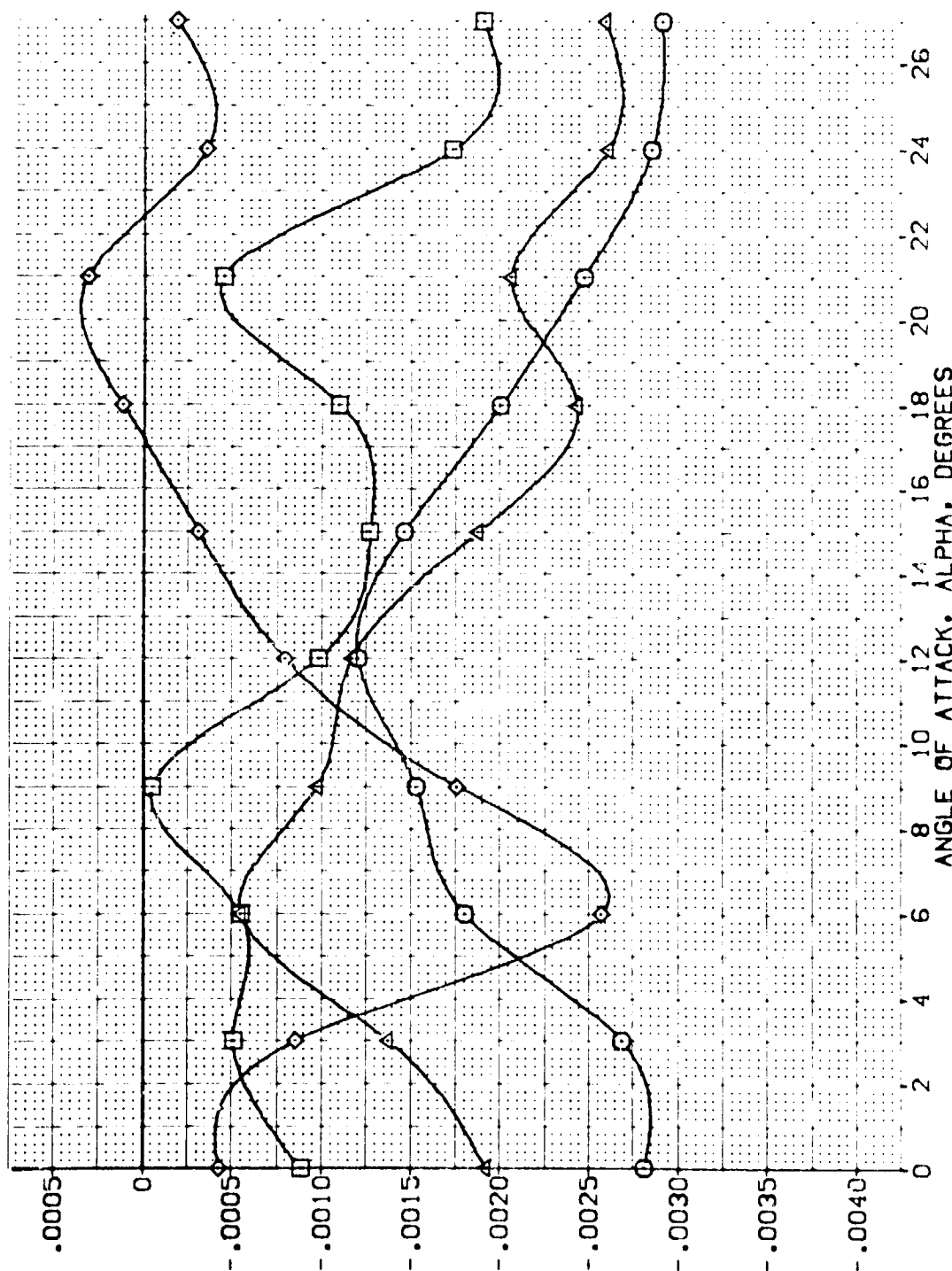


FIG. 18 AILERON EFFECTIVENESS DERIVATIVES





PITCHING MOMENT COEFF. DERIV. WRT AILERON DEFL., DCLMDA, PER DEG

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DA	ELEVON	BOG LAP	SPURK	REFERENCE INFORMATION
(V4022)	ARC -747 C/S3A B C M F V	20.000	-20.000	-11.700	25.000	SREF 2.4210 SQ.F.
(V4005)	ARC -747 C/S3A B C M F V	5.000	-10.000	-11.700	25.000	LREF 14.2440
(V4004)	ARC -747 C/S3A B C M F V	5.000	-10.000	-11.700	25.000	BREF 28.1004
(V4021)	ARC -747 C/S3A B C M F V	10.000	-10.000	-11.700	25.000	XREF 32.3010
						YREF 11.2500
						ZREF 11.2500
						SCALE .0300

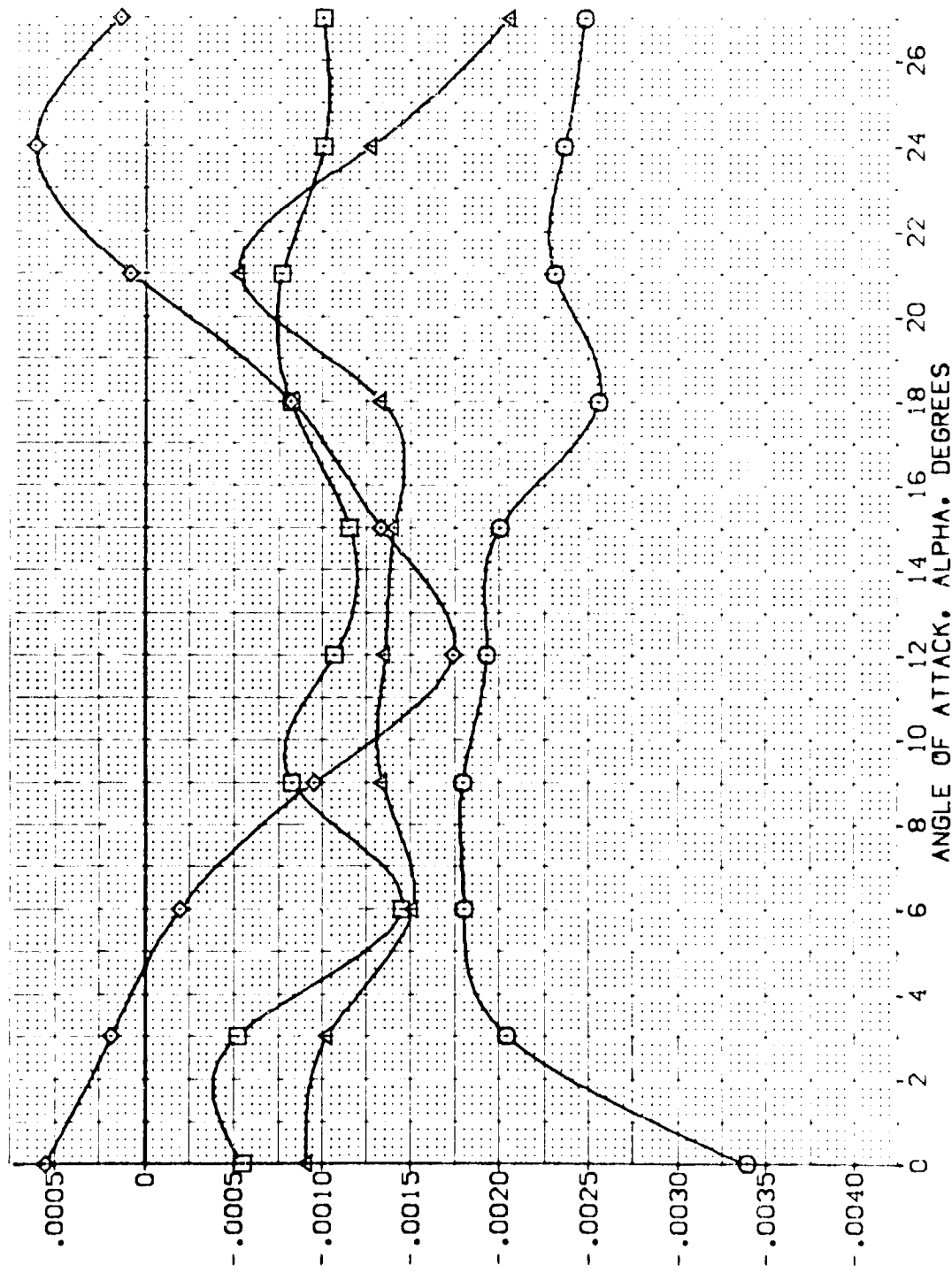


FIG. 18 AILERON EFFECTIVENESS DERIVATIVES

(C)MACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DA	ELEVON	BOFLAP	SPDBRK	REFERENCE INFORMATION
{VEJ022}	ARC 11-747 OA53A B C H F VI	20.000	-20.000	-11.700	25.000	SREF 2.4210 SQ.FT.
{VEJ005}	ARC 11-747 OA53A B C H F VI	5.000	-10.000	-11.700	25.000	LREF 14.2440 IN.
{VEJ004}	ARC 11-747 OA53A B C H F VI	5.000	-10.000	-11.700	25.000	BREF 28.1004 IN.
{VEJ021}	ARC 11-747 OA53A B C H F VI	10.000	-10.000	-11.700	25.000	XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

PITCHING MOMENT COEFF. DERIV. WRT AILERON DEF., DCLMDA, PER DEG

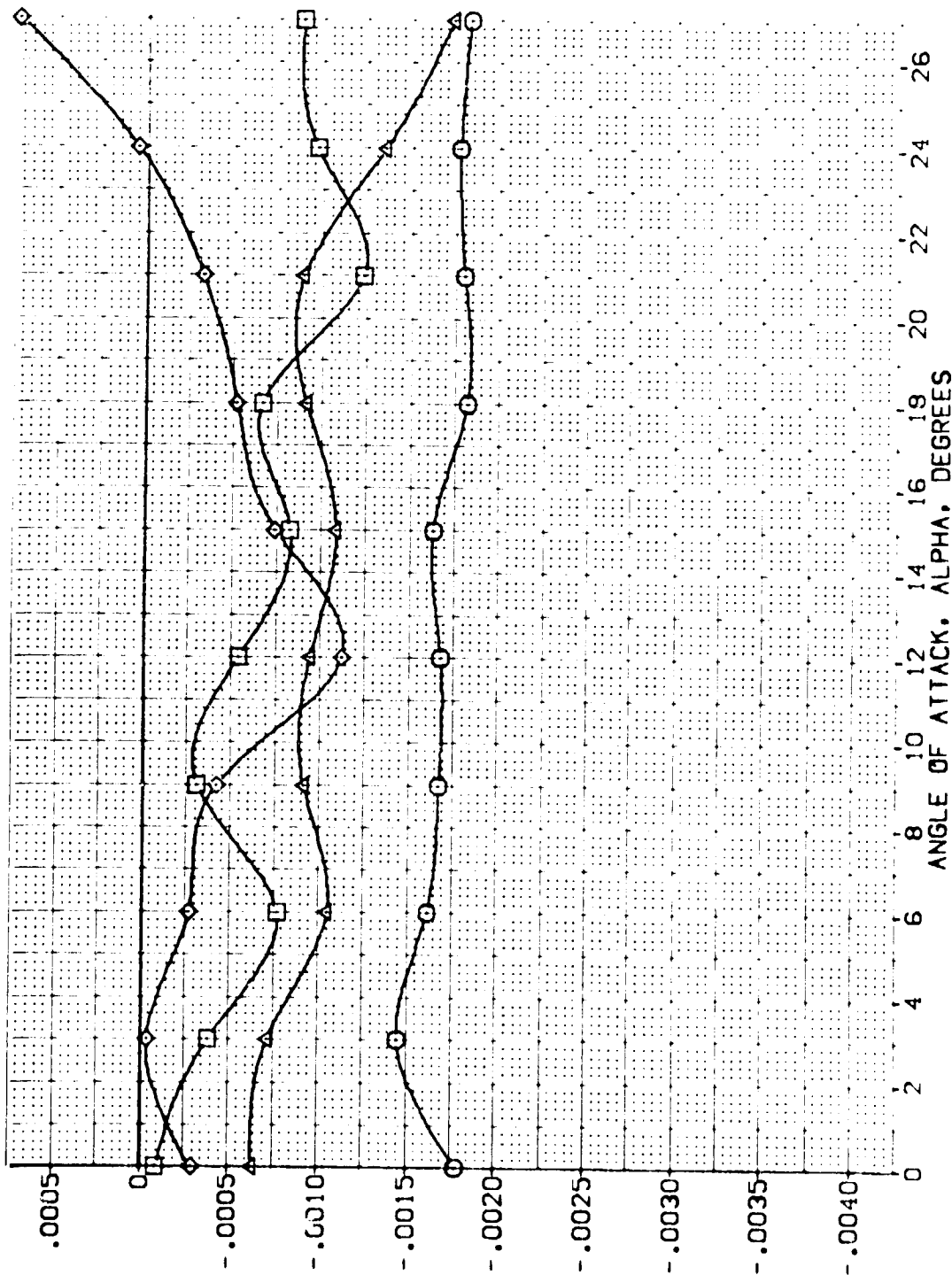


FIG. 18 AILERON EFFECTIVENESS DERIVATIVES

(C)MACH = 1.20



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BDF LAP	SPDRBK	REFERENCE INFORMATION
(AEJ028)	ARC 11-747 D453A S C M F V1	.000	-10.000	-11.700	25.000	SREF 2.4210 SC. ST.
(AEJ030)	ARC 11-747 D453A S C M F V1	10.000	-10.000	-11.700	25.000	LREF 14.2440
(AEJ031)	ARC 11-747 D453A S C M F V1	20.000	-10.000	-11.700	25.000	BRF 20.1004
(AEJ032)	ARC 11-747 D453A S C M F V1	10.000	-25.000	-11.700	25.000	YMRP 37.3010
(AEJ033)	ARC 11-747 D453A S C M F V1	20.000	-25.000	-11.700	25.000	ZMRP 11.2500
(AEJ034)	ARC 11-747 D453A S C M F V1	20.000	-25.000	-11.700	25.000	SCALE .0300 SCALE

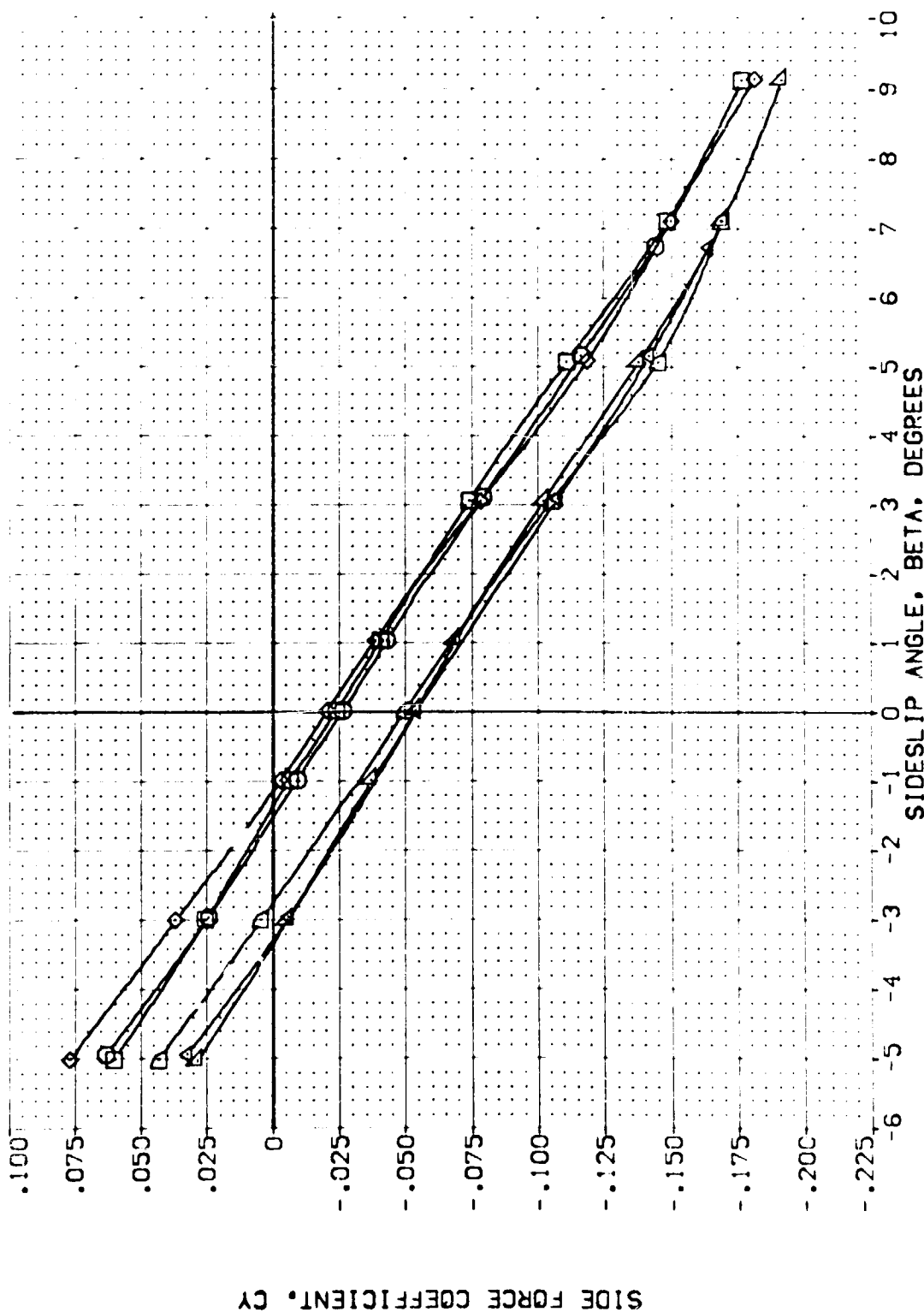


FIG. 19 RUDDER EFFECTS, SPEEDBRAKE 25 DEGREES

(A)MAC = .60

DATA SET SYMB.	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOLAP	SPOBRK	REFERENCE INFORMATION
[AEJ079]	ARC 11-747 BA53A B C M F VI V	.000	-10.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[AEJ080]	ARC 11-747 BA53A B C M F VI V	10.000	-10.000	-11.700	25.000	LREF 14.2440 IN.
[AEJ081]	ARC 11-747 BA53A B C M F VI V	20.000	-10.000	-11.700	25.000	BREF 28.1004 IN.
[AEJ082]	ARC 11-747 BA53A B C M F VI V	10.000	-25.000	-11.700	25.000	XMRP 32.3010 IN.
[AEJ083]	ARC 11-747 BA53A B C M F VI V	10.000	-25.000	-11.700	25.000	YMRP 11.2500 IN.
[AEJ084]	ARC 11-747 BA53A B C M F VI V	20.000	-25.000	-11.700	25.000	SCALE .0300

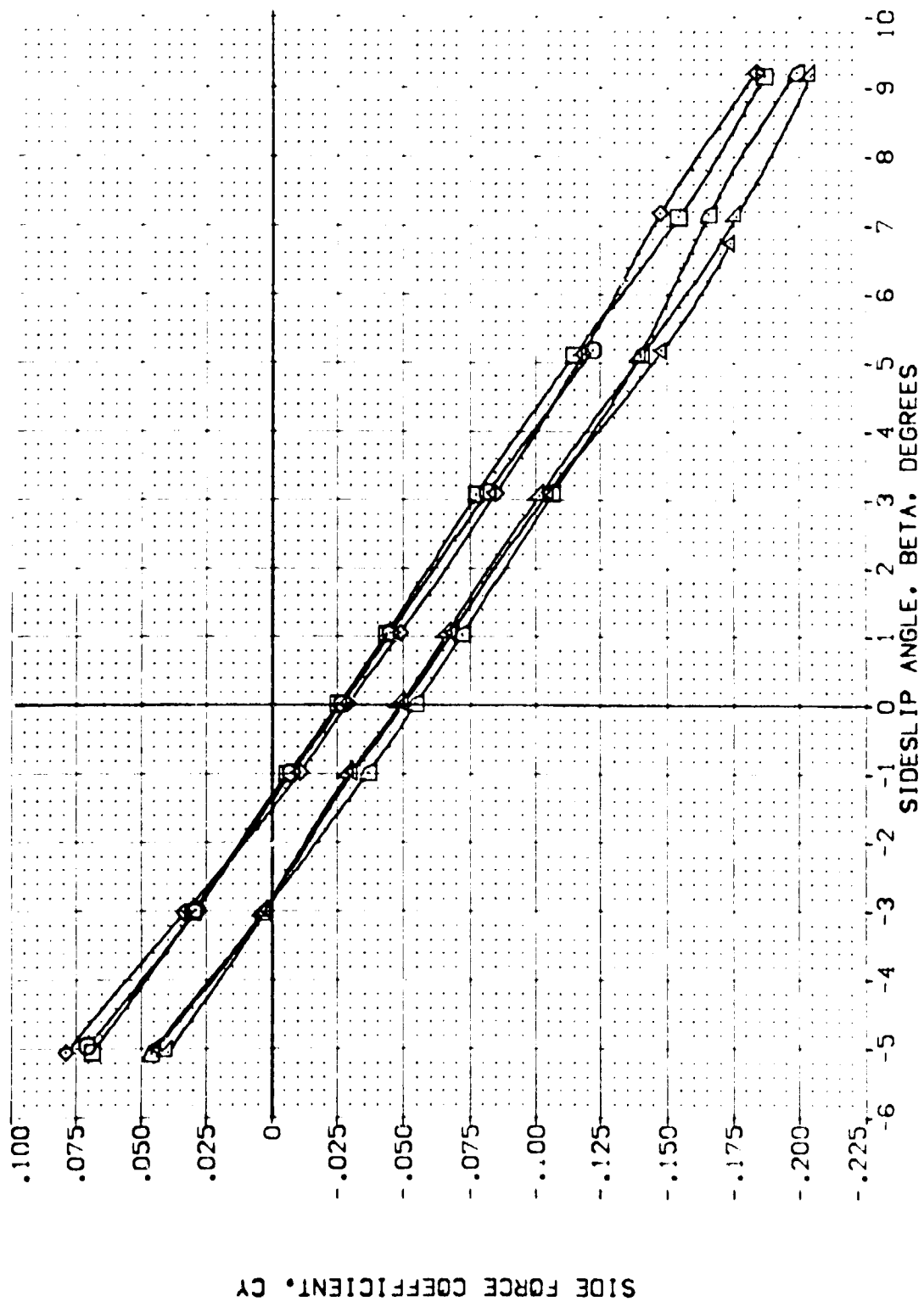


FIG. 19 RUDDER EFFECTS, SPEEDBRAKE 25 DEGREES

(B)MAC = .80

DATA SET SYMB.	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPEED	REFERENCE INFORMATION
[AEJ029]	ARC 11-747 CAS3A B C M F V	.000	-10.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[AEJ030]	ARC 11-747 CAS3A B C M F V	10.000	-10.000	-11.700	25.000	LREF 14.2443
[AEJ031]	ARC 11-747 CAS3A B C M F V	20.000	-10.000	-11.700	25.000	BREF 28.1304
[AEJ032]	ARC 11-747 CAS3A B C M F V	10.000	-25.000	-11.700	25.000	AMREF 32.3010
[AEJ033]	ARC 11-747 CAS3A B C M F V	10.000	-25.000	-11.700	25.000	YREF .0000
[AEJ034]	ARC 11-747 CAS3A B C M F V	20.000	-25.000	-11.700	25.000	ZREF 11.2500
						SCALE .0000

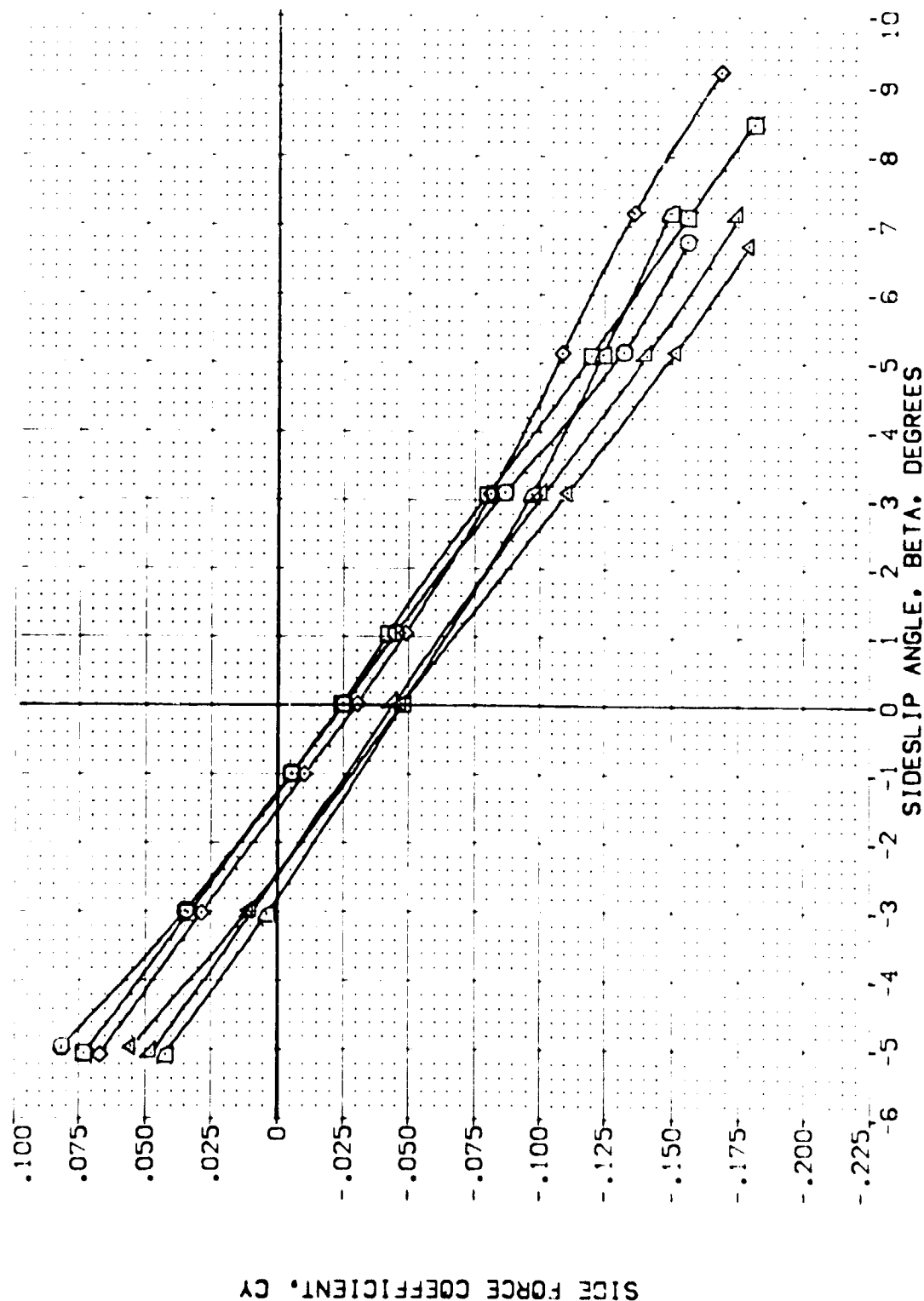


FIG. 19 RUDDER EFFECTS, SPEEDBRAKE 25 DEGREES

(C)<sub>MAC</sub> = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPODBK	REFERENCE INFORMATION
(AEJ029)	ARC 11-747 DAS3A B C M F V	0.000	-10.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(AEJ030)	ARC 11-747 DAS3A B C M F V	10.000	-10.000	-11.700	25.000	LREF 14.2440 IN.
(AEJ031)	ARC 11-747 DAS3A B C M F V	20.000	-10.000	-11.700	25.000	BREF 28.1004 IN.
(AEJ032)	ARC 11-747 DAS3A B C M F V	10.000	-25.000	-11.700	25.000	XMRP 32.3010 IN.
(AEJ033)	ARC 11-747 DAS3A B C M F V	20.000	-25.000	-11.700	25.000	YMRP 11.2500 IN.
(AEJ034)	ARC 11-747 DAS3A B C M F V	20.000	-25.000	-11.700	25.000	ZMRP 11.2500 IN.
					SCALE	SCALE

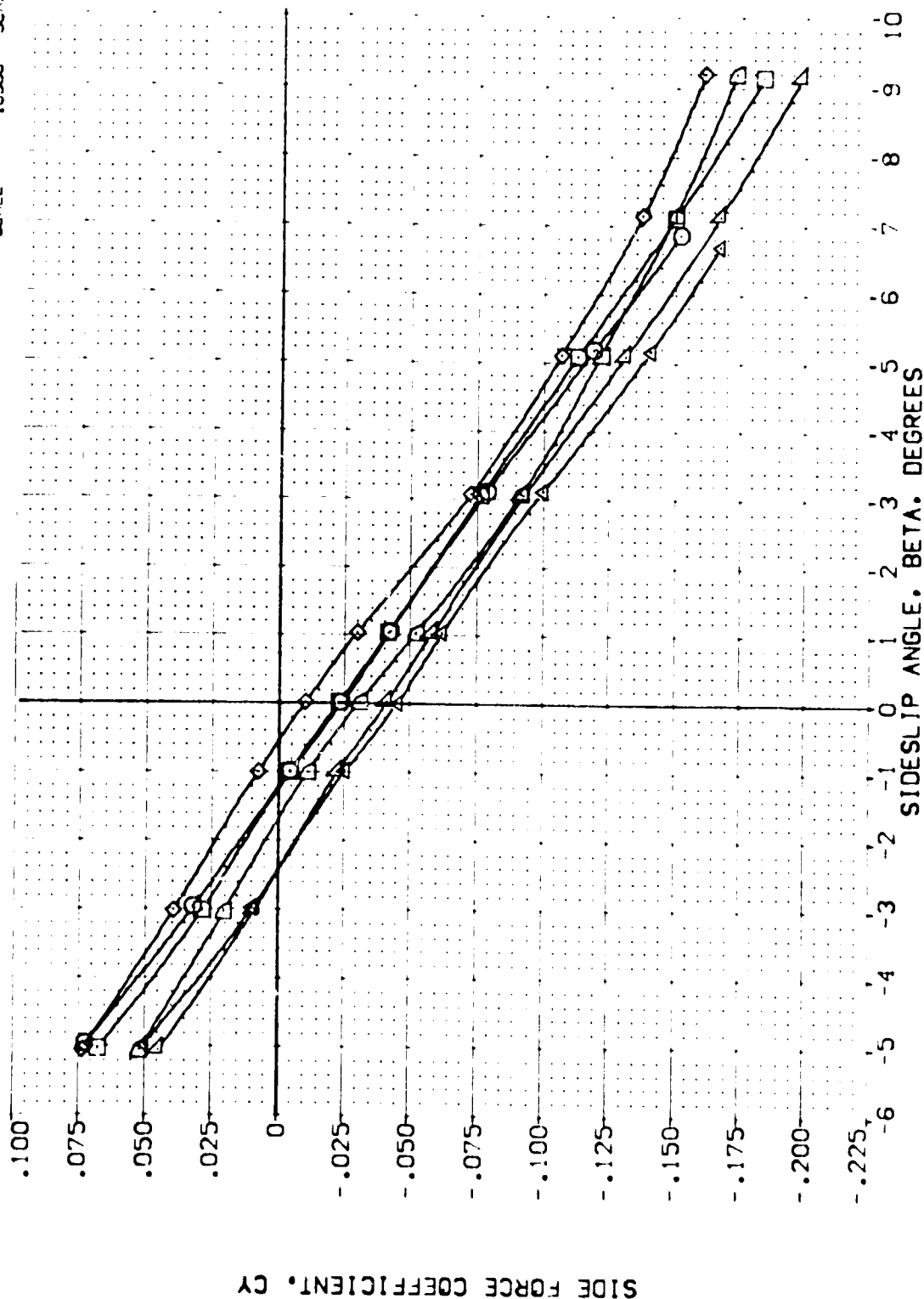


FIG. 19 RUDDER EFFECTS. SPEEDBRAKE 25 DEGREES

(C)MAC = 1.05



DATA SET SYMBL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPEED	REFERENCE INFORMATION
(AEJ029)	ARC 11-747 OAS3A B C H F V	0.000	-10.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(AEJ030)	ARC 11-747 OAS3A B C H F V	10.000	-10.000	-11.700	25.000	LREF 14.2440
(AEJ031)	ARC 11-747 OAS3A B C H F V	20.000	-10.000	-11.700	25.000	BREF 21.1004
(AEJ032)	ARC 11-747 OAS3A B C H F V	10.000	-25.000	-11.700	25.000	XMRP 32.3010
(AEJ033)	ARC 11-747 OAS3A B C H F V	20.000	-25.000	-11.700	25.000	YMRP 11.2500
(AEJ034)	ARC 11-747 OAS3A B C H F V	20.000	-25.000	-11.700	25.000	SCALE .0300

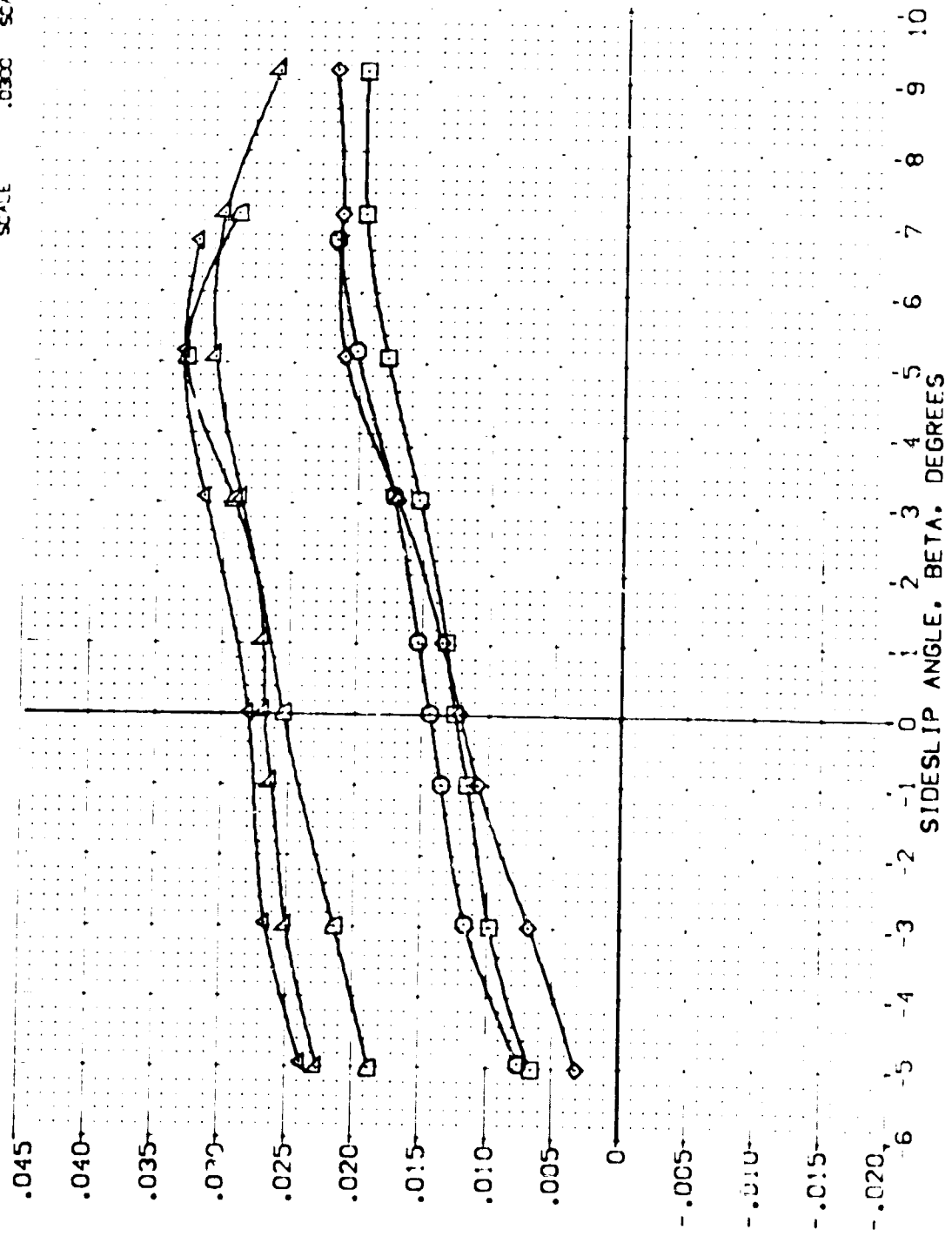


FIG. 19 RUDDER EFFECTS, SPEEDRAKE 25 DEGREES

(A)MAC = .60



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BDLAP	SPDRBK	REFERENCE INFORMATION
[AE1029]	ARC 11-747 D153A B C M E V	.000	-10.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[AE1030]	ARC 11-747 D153A B C M E V	10.000	-10.000	-11.700	25.000	LREF 14.2440
[AE1031]	ARC 11-747 D153A B C M E V	20.000	-10.000	-11.700	25.000	BREF 28.1014
[AE1032]	ARC 11-747 D153A B C M E V	10.000	-25.000	-11.700	25.000	XMRP 32.3010
[AE1033]	ARC 11-747 D153A B C M E V	20.000	-25.000	-11.700	25.000	YMRP 11.2500
[AE1034]	ARC 11-747 D153A B C M E V	20.000	-25.000	-11.700	25.000	ZMRP 11.2500 SCALE

YAWING MOMENT COEFFICIENT, CYN (BODY AXIS)

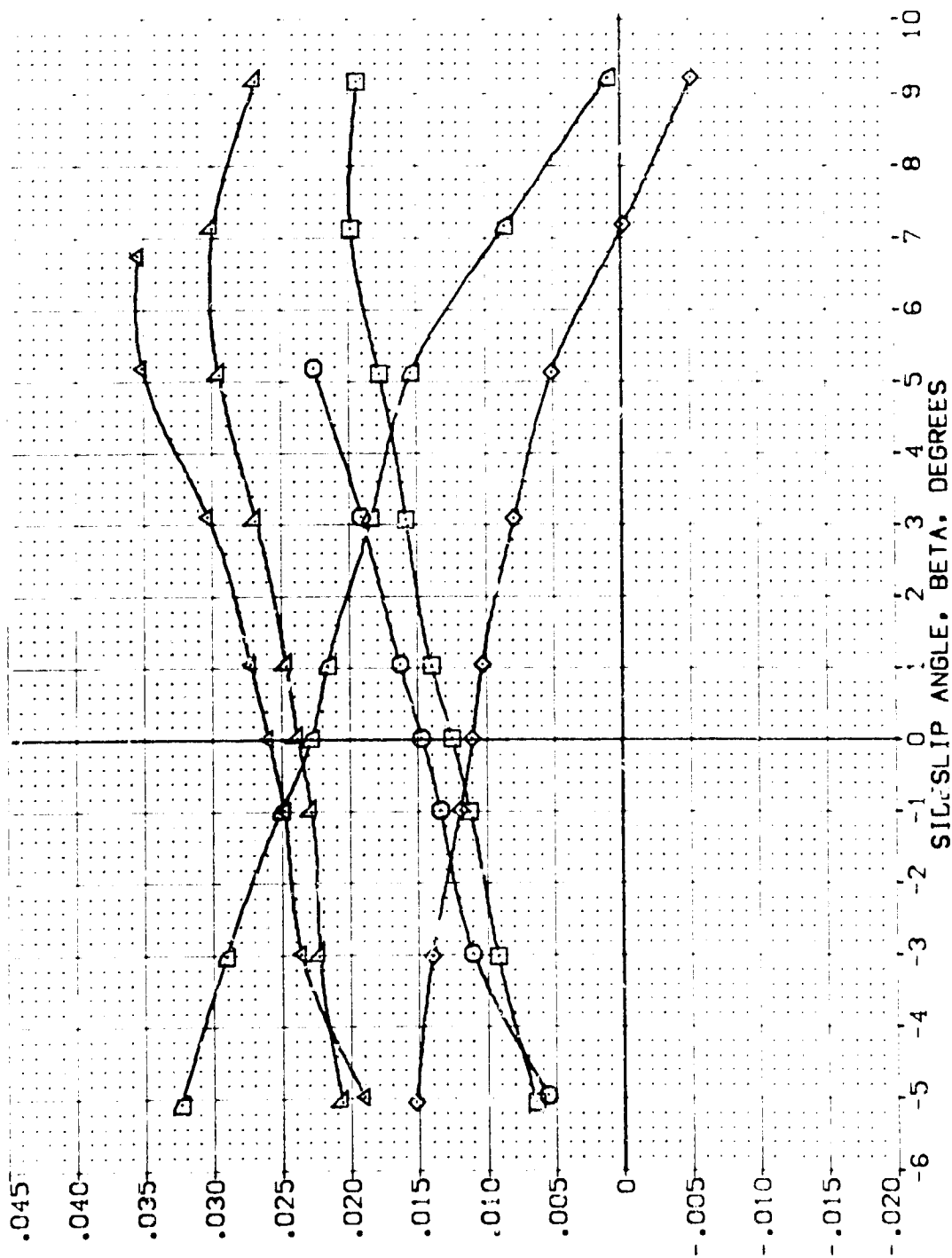


FIG. 19 RUDDER EFFECTS, SPEEDBRAKE 25 DEGREES

(B)MAC = .80

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	NOT	RV/L	ALPHA	RUDDER	BOFLAP	SPEEDBRAK	REFERENCE INFORMATION
[AE1029]	ARC	-747 DA53A B C H F VI	V	RV/L	.000	-10.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[AE1030]	ARC	-747 DA53A B C H F VI	V	RV/L	10.000	-10.000	-11.700	25.000	LREF 14.2440 IN.
[AE1031]	ARC	-747 DA53A B C H F VI	V	RV/L	20.000	-10.000	-11.700	25.000	BREF 28.1004 IN.
[AE1032]	ARC	-747 DA53A B C H F VI	V	RV/L	10.000	-25.000	-11.700	25.000	XMRP 32.3010 IN.
[AE1033]	ARC	-747 DA53A B C H F VI	V	RV/L	10.000	-25.000	-11.700	25.000	YMRP 0.0000 IN.
[AE1034]	ARC	-747 DA53A B C H F VI	V	RV/L	20.000	-25.000	-11.700	25.000	ZMRP 11.2500 IN.
									SCALE .0300

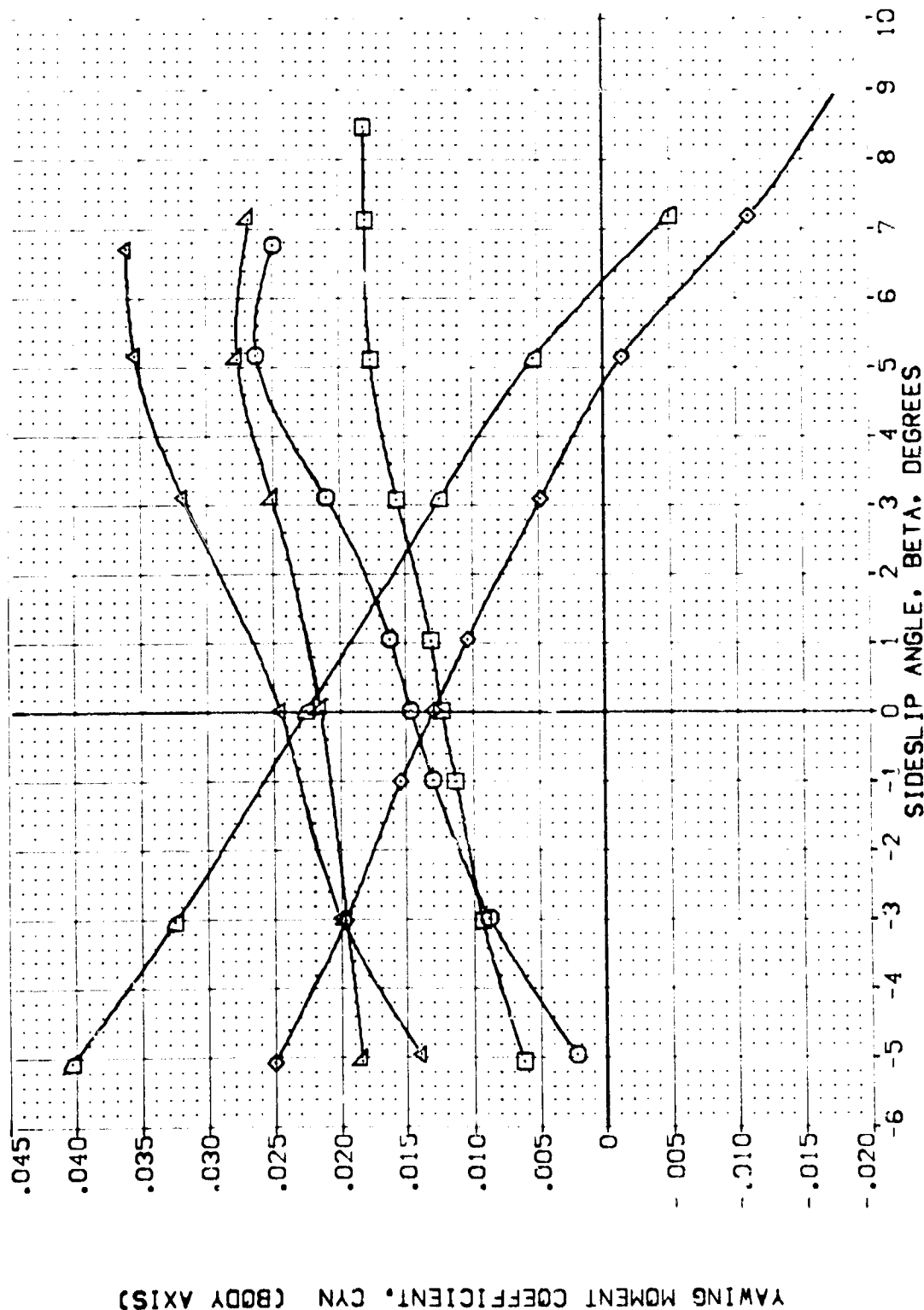


FIG. 19 RUDDER EFFECTS, SPEEDBRAKE 25 DEGREES

(C)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BD/LAP	SPDRBK	REFERENCE INFORMATION
[AEJ029]	ARC 11-747 BA53A B C M F V I V	0.000	-10.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[AEJ030]	ARC 11-747 BA53A B C M F V I V	10.000	-10.000	-11.700	25.000	LRFF 14.2440
[AEJ031]	ARC 11-747 BA53A B C M F V I V	20.000	-10.000	-11.700	25.000	BRFF 28.1004
[AEJ032]	ARC 11-747 BA53A B C M F V I V	10.000	-25.000	-11.700	25.000	XRFF 32.3010
[AEJ033]	ARC 11-747 BA53A B C M F V I V	10.000	-25.000	-11.700	25.000	YMRP 11.0000
[AEJ034]	ARC 11-747 BA53A B C M F V I V	20.000	-25.000	-11.700	25.000	ZMRP 11.2500
						SCALE 0.300

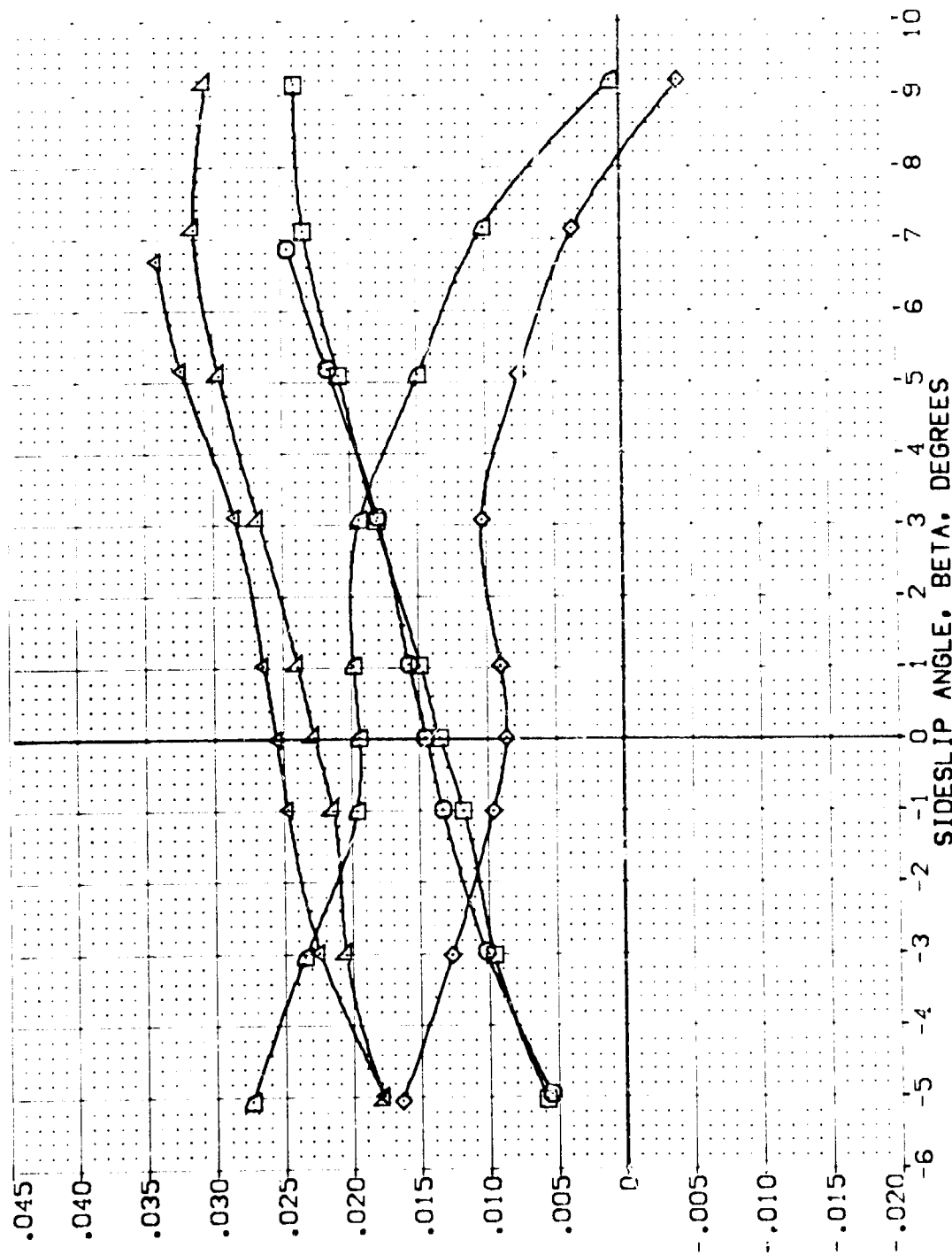


FIG. 19 RUDDER EFFECTS, SPEEDBRAKE 25 DEGREES

(D)MACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPEED	REFERENCE INFORMATION
[AEJ029]	ARC 11-747 BASSA B C M F VI	0.000	-10.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[AEJ030]	ARC 11-747 BASSA B C M F VI	10.000	-10.000	-11.700	25.000	LREF 14.2440 IN.
[AEJ031]	ARC 11-747 BASSA B C M F VI	20.000	-10.000	-11.700	25.000	BREF 28.1004 IN.
[AEJ032]	ARC 11-747 BASSA B C M F VI	10.000	-25.000	-11.700	25.000	XMRP 32.3010 IN.
[AEJ033]	ARC 11-747 BASSA B C M F VI	10.000	-25.000	-11.700	25.000	YMRP 11.0000 IN.
[AEJ034]	ARC 11-747 BASSA B C M F VI	20.000	-25.000	-11.700	25.000	ZMRP 11.2500 IN.
						SCALE .0300

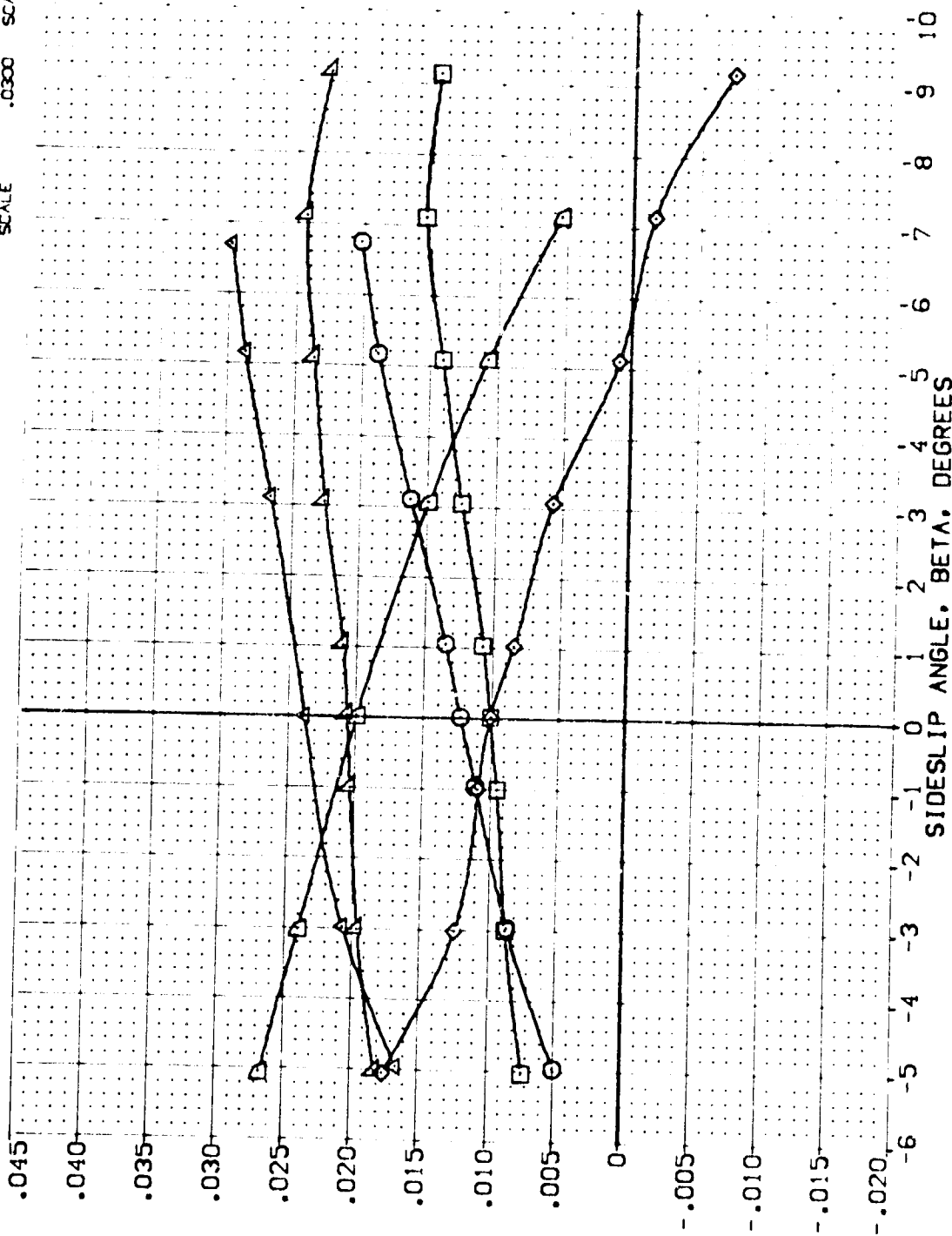


FIG. 19 RUDDER EFFECTS, SPEEDBRAKE 25 DEGREES

(E)MACH = 1.20



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPOBRK	REFERENCE INFORMATION
[AEJ029]	ARC 11-747 D453A B C H F VI	0.000	-10.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[AEJ030]	ARC 11-747 D453A B C H F VI	10.000	-10.000	-11.700	25.000	LREF 14.2440 IN.
[AEJ031]	ARC 11-747 D453A B C H F VI	20.000	-10.000	-11.700	25.000	BREF 28.1004 IN.
[AEJ032]	ARC 11-747 D453A B C H F VI	10.000	-25.000	-11.700	25.000	XMRP 32.3010 IN.
[AEJ033]	ARC 11-747 D453A B C H F VI	10.000	-25.000	-11.700	25.000	YMRP 11.2500 IN.
[AEJ034]	ARC 11-747 D453A B C H F VI	20.000	-25.000	-11.700	25.000	ZMRP 11.2500 IN.
						SCALE .0300

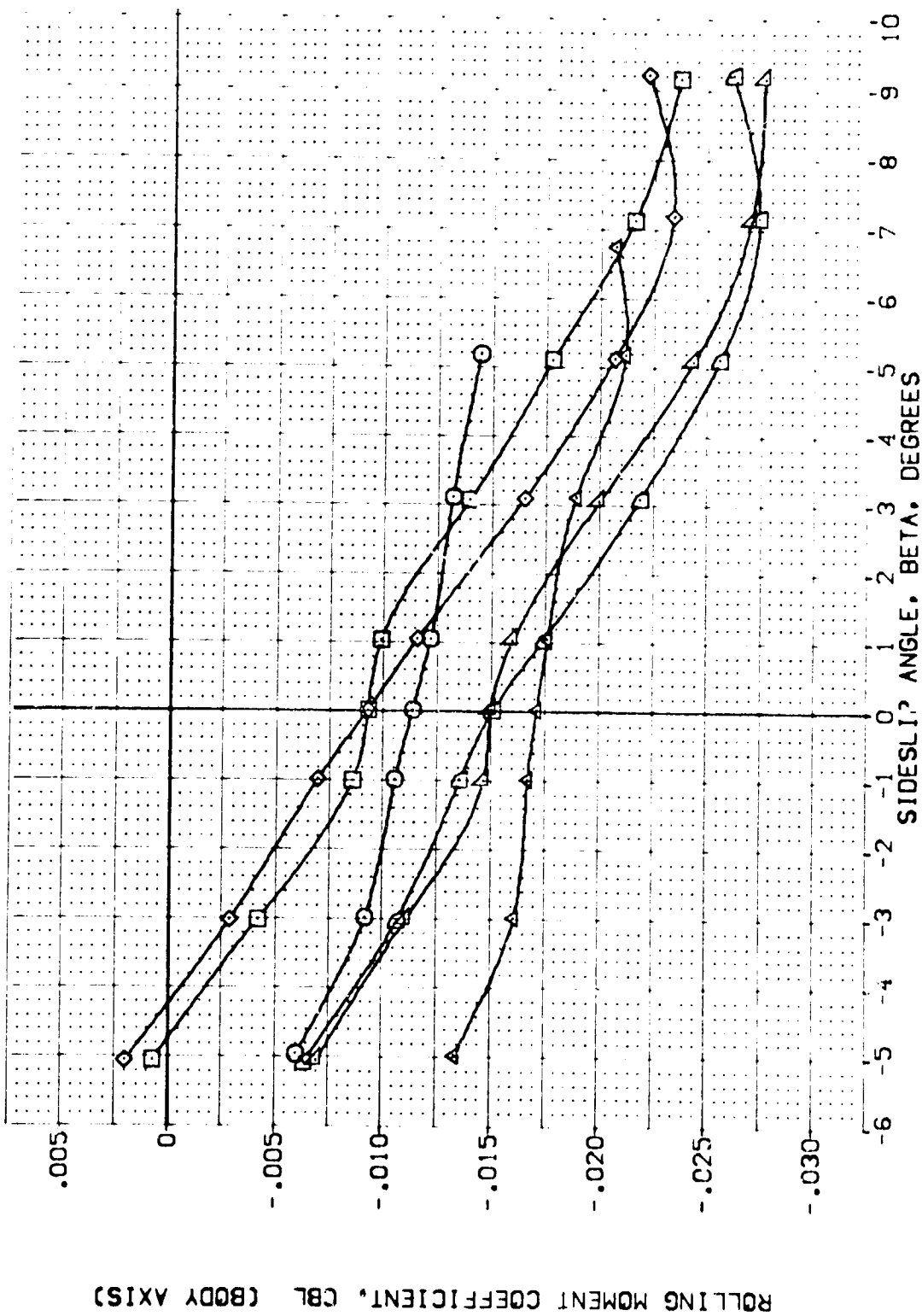


FIG. 19 RUDDER EFFECTS, SPEEDBRAKE 25 DEGREES

(B)MACH = .P0

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPOBRK	REFERENCE INFORMATION
[AEJ029]	ARC 11-747 BA53A B C M F VI V	0.000	-10.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[AEJ030]	ARC 11-747 BA53A B C M F VI V	10.000	-10.000	-11.700	25.000	LREF 14.2440 IN.
[AEJ031]	ARC 11-747 BA53A B C M F VI V	20.000	-10.000	-11.700	25.000	BREF 28.11004 IN.
[AEJ032]	ARC 11-747 BA53A B C M F VI V	10.000	-25.000	-11.700	25.000	XMRP 32.3010 IN.
[AEJ033]	ARC 11-747 BA53A B C M F VI V	10.000	-25.000	-11.700	25.000	YMRP 0.0000 IN.
[AEJ034]	ARC 11-747 BA53A B C M F VI V	20.000	-25.000	-11.700	25.000	ZMRP 11.2500 IN.
						SCALE 0.0000

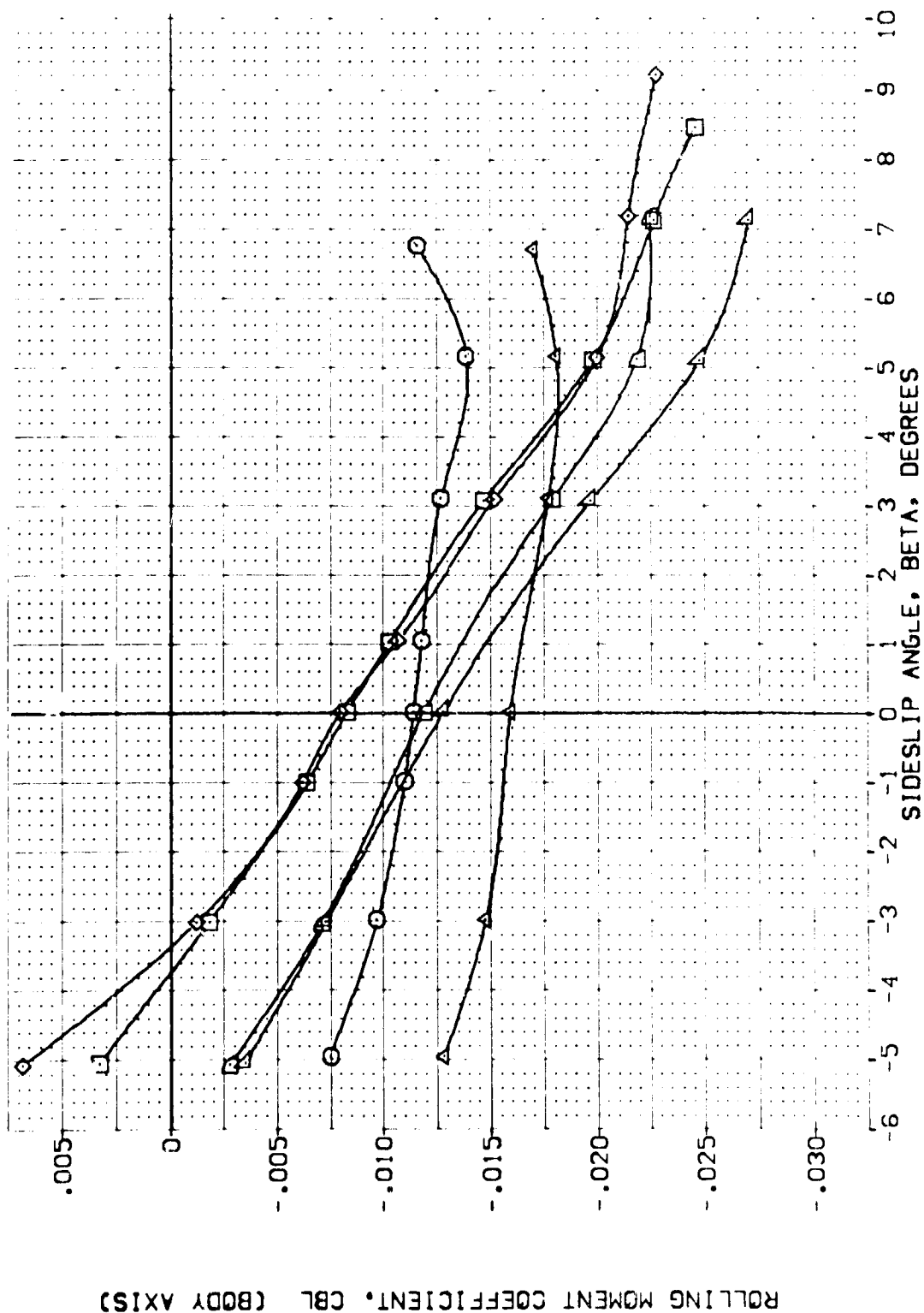


FIG. 19 RUDDER EFFECTS, SPEEDBRAKE 25 DEGREES

(C)MAC = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDER	BOFLAP	SPDBRK	REFERENCE INFORMATION
[AEJ029]	ARC 11-747 BA53A B C M F VI V	0.000	-10.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[AEJ030]	ARC 11-747 BA53A B C M F VI V	10.000	-10.000	-11.700	25.000	LREF 14.2140
[AEJ031]	ARC 11-747 BA53A B C M F VI V	20.000	-10.000	-11.700	25.000	BREF 28.1004
[AEJ032]	ARC 11-747 BA53A B C M F VI V	10.000	-25.000	-11.700	25.000	XMRP 32.3010
[AEJ033]	ARC 11-747 BA53A B C M F VI V	10.000	-25.000	-11.700	25.000	YMRP 0.000
[AEJ034]	ARC 11-747 BA53A B C M F VI V	20.000	-25.000	-11.700	25.000	ZMRP 11.2500
						SCALE 0.000

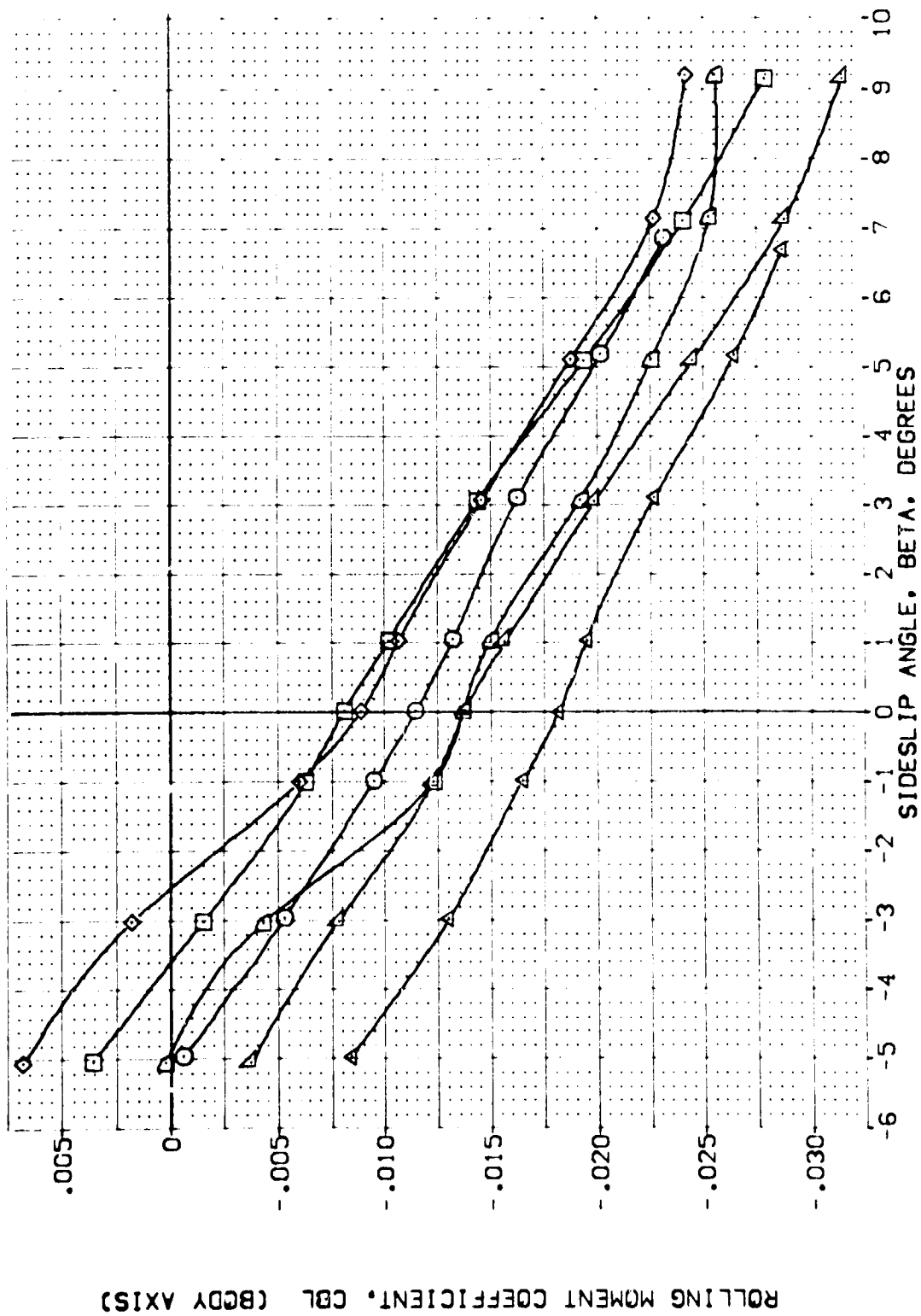


FIG. 19 RUDDER EFFECTS, SPEEDBRAKE 25 DEGREES

(C)MACH = 1.05



DATA SET SYMBOL CONFIGURATION DESCRIPTION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NOT	RV/L	ALPHA	RUDDER	BDLAP	SPOBRK	REFERENCE INFORMATION
[AE0029]	ARC 11-747 DA53A B C M F V	V	RV/L	10.000	-10.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[AE0030]	ARC 11-747 DA53A B C M F V	V	RV/L	10.000	-10.000	-11.700	25.000	LREF 14.2440 IN.
[AE0031]	ARC 11-747 DA53A B C M F V	V	RV/L	20.000	-10.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[AE0032]	ARC 11-747 DA53A B C M F V	V	RV/L	20.000	-10.000	-11.700	25.000	LREF 14.2440 IN.
[AE0033]	ARC 11-747 DA53A B C M F V	V	RV/L	10.000	-25.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[AE0034]	ARC 11-747 DA53A B C M F V	V	RV/L	10.000	-25.000	-11.700	25.000	LREF 14.2440 IN.

SCALE 11.2500 .0300

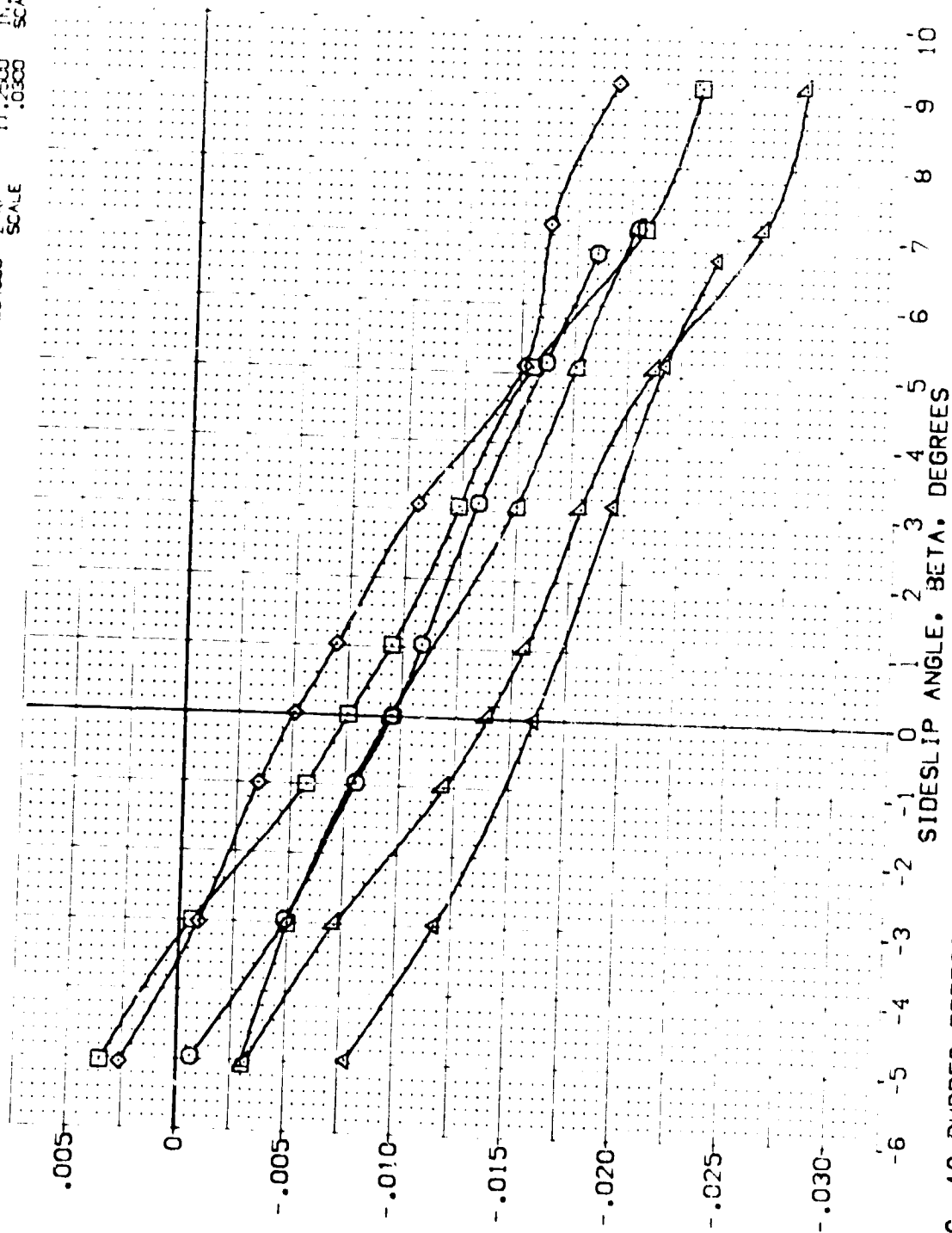


FIG. 19 RUDDER EFFECTS, SPEEDBRAKE 25 DEGREES

(E)MAC = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BUFLAP	SPEEDBRAKE	REFERENCE INFORMATION
[AEJ035]	ARC -747 DA53A B C H F V	0.000	-10.000	-11.700	55.000	SREF 2.4210 SQ.FT.
[AEJ036]	ARC -747 DA53A B C H F V	10.000	-10.000	-11.700	55.000	LREF 14.2440 IN.
[AEJ037]	ARC -747 DA53A B C H F V	20.000	-10.000	-11.700	55.000	BREF 28.1004 IN.
[AEJ051]	ARC -747 DA53A B C H F V	10.000	-25.000	-11.700	55.000	XMRP 32.3010 IN.
[AEJ052]	ARC -747 DA53A B C H F V	10.000	-25.000	-11.700	55.000	YMRP 11.2500 IN.
[AEJ053]	ARC -747 DA53A B C H F V	20.000	-25.000	-11.700	55.000	ZMRP 11.2500 IN.
						SCALE .0300

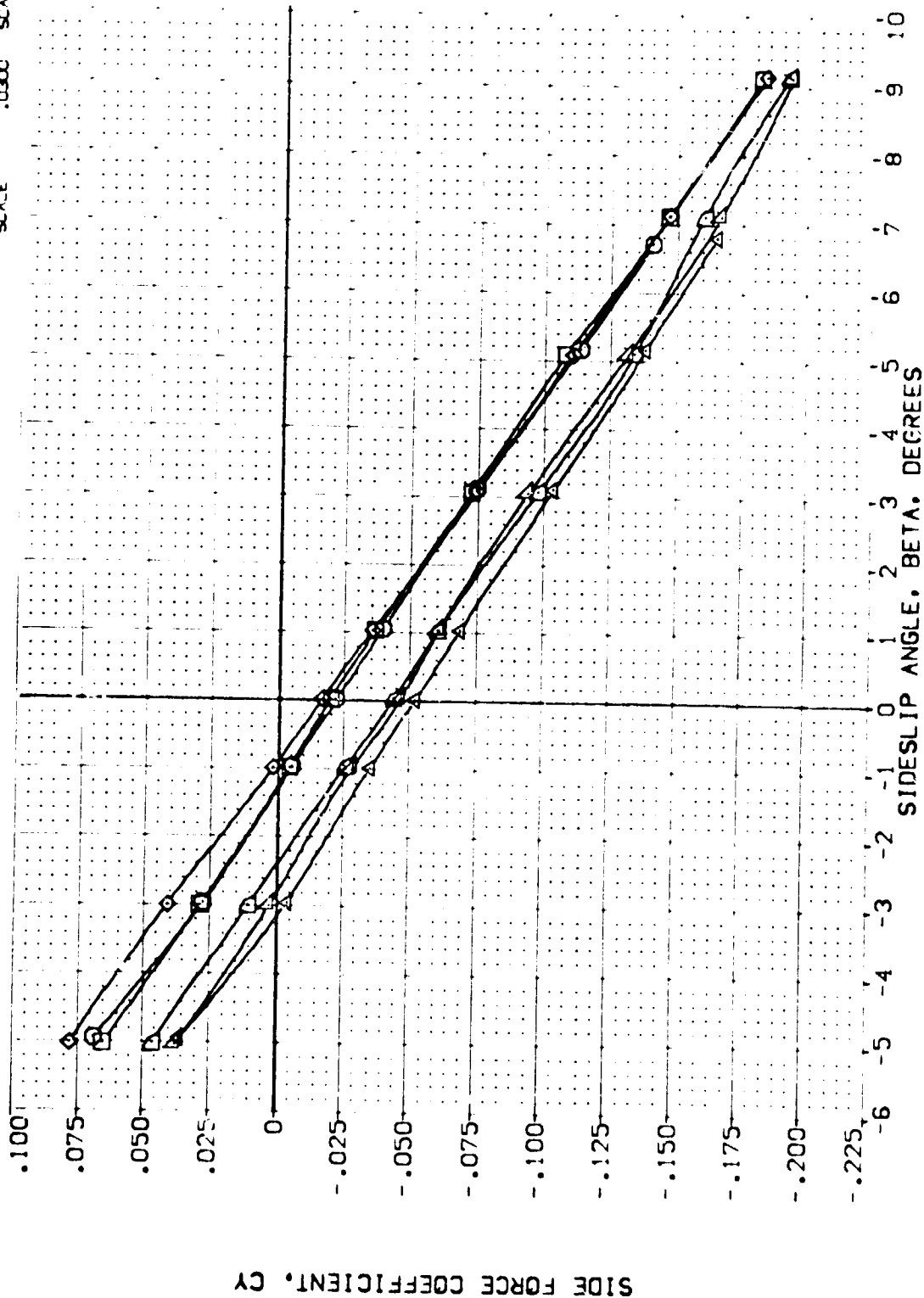


FIG. 20 RUDDER EFFECTS, SPEEDBRAKE 55 DEGREES

(A)MAC = .60

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	NO.	RV/L	ALPHA	RUDDER	BD/LAP	SPEEDBRK	REFERENCE INFORMATION
(AE1035)	Q	ARC 11-747 GA53A B C M F VI	V	RV/L	.000	-10.000	-11.700	55.000	SREF 2.4210 50. FT.
(AE1036)	Q	ARC 11-747 GA53A B C M F VI	V	RV/L	10.000	-10.000	-11.700	55.000	LREF 14.2440 10.
(AE1037)	Q	ARC 11-747 GA53A B C M F VI	V	RV/L	20.000	-10.000	-11.700	55.000	BREF 28.1004 10.
(AE1038)	Q	ARC 11-747 GA53A B C M F VI	V	RV/L	10.000	-20.000	-11.700	55.000	XREF 32.3010 10.
(AE1039)	Q	ARC 11-747 GA53A B C M F VI	V	RV/L	10.000	-20.000	-11.700	55.000	YREF 11.0000 10.
(AE1040)	Q	ARC 11-747 GA53A B C M F VI	V	RV/L	10.000	-20.000	-11.700	55.000	ZREF 11.0000 10.
(AE1041)	Q	ARC 11-747 GA53A B C M F VI	V	RV/L	10.000	-20.000	-11.700	55.000	SCALE .0300

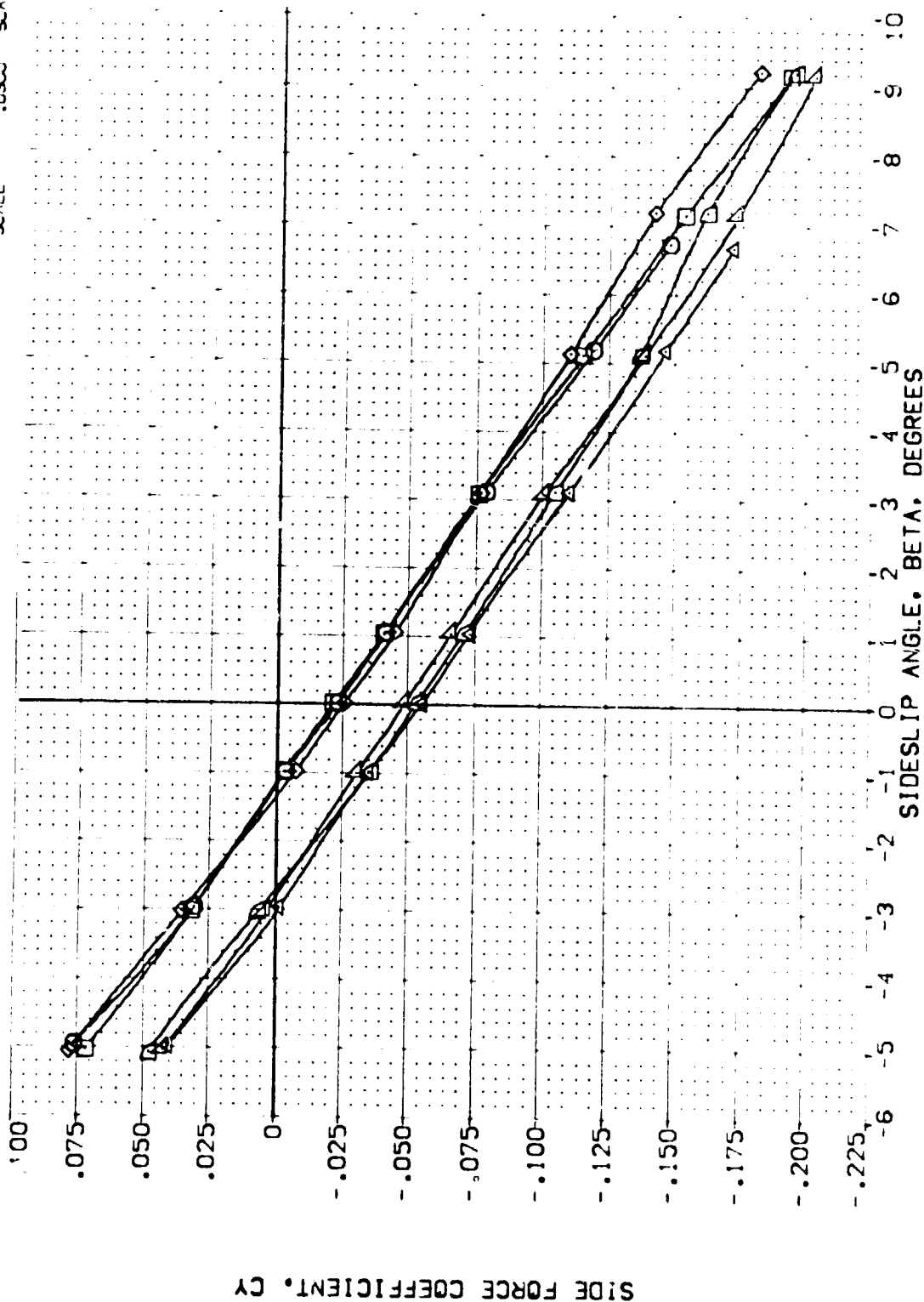


FIG. 20 RUDDER EFFECTS, SPEEDBRAKE 55 DEGREES

(B)MAC = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BD FLAP	SPEED	REFERENCE INFORMATION
[AEJ025]	ARC 11-747 OAS3A B C H F VI	0.000	-10.000	-11.700	55.000	SREF 2.4210 SQ. FT.
[AEJ036]	ARC 11-747 OAS3A B C H F VI	10.000	-10.000	-11.700	55.000	LREF 14.2440
[AEJ037]	ARC 11-747 OAS3A B C H F VI	20.000	-10.000	-11.700	55.000	BREF 28.1004
[AEJ051]	ARC 11-747 OAS3A B C H F VI	10.000	-25.000	-11.700	55.000	XMRP 32.3010
[AEJ052]	ARC 11-747 OAS3A B C H F VI	20.000	-25.000	-11.700	55.000	YMRP 11.2500
[AEJ053]	ARC 11-747 OAS3A B C H F VI	20.000	-25.000	-11.700	55.000	SCALE 0.0300

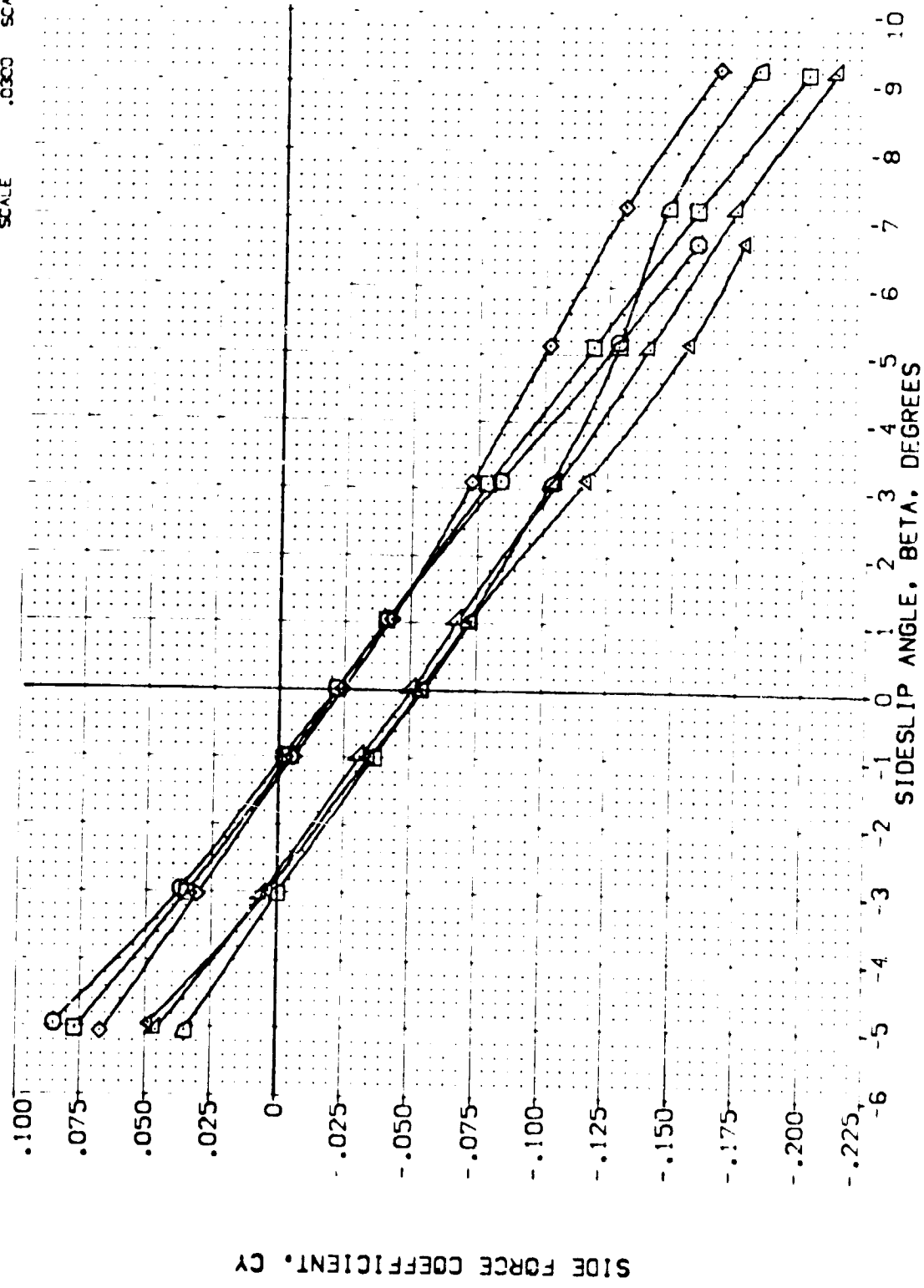


FIG. 20 RUDDER EFFECTS, SPEEDBRAKE 55 DEGREES

(C)WAG = .90

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOAT LAP	SPEED	REFERENCE INFORMATION
(AE4005)	ARC	-747 BA53A B C H F VI V	0.000	-10.000	-11.700	55.000	SREF 2.4210 50.000
(AE4006)	ARC	-747 BA53A B C H F VI V	10.000	-10.000	-11.700	55.000	LREF 14.2410
(AE4007)	ARC	-747 BA53A B C H F VI V	20.000	-10.000	-11.700	55.000	BREF 28.1000
(AE4051)	ARC	-747 BA53A B C H F VI V	10.000	-25.000	-11.700	55.000	XREF 32.3010
(AE4052)	ARC	-747 BA53A B C H F VI V	10.000	-25.000	-11.700	55.000	YREF 0.0000
(AE4053)	ARC	-747 BA53A B C H F VI V	20.000	-25.000	-11.700	55.000	ZREF 11.2500
							SCALE 0.0000

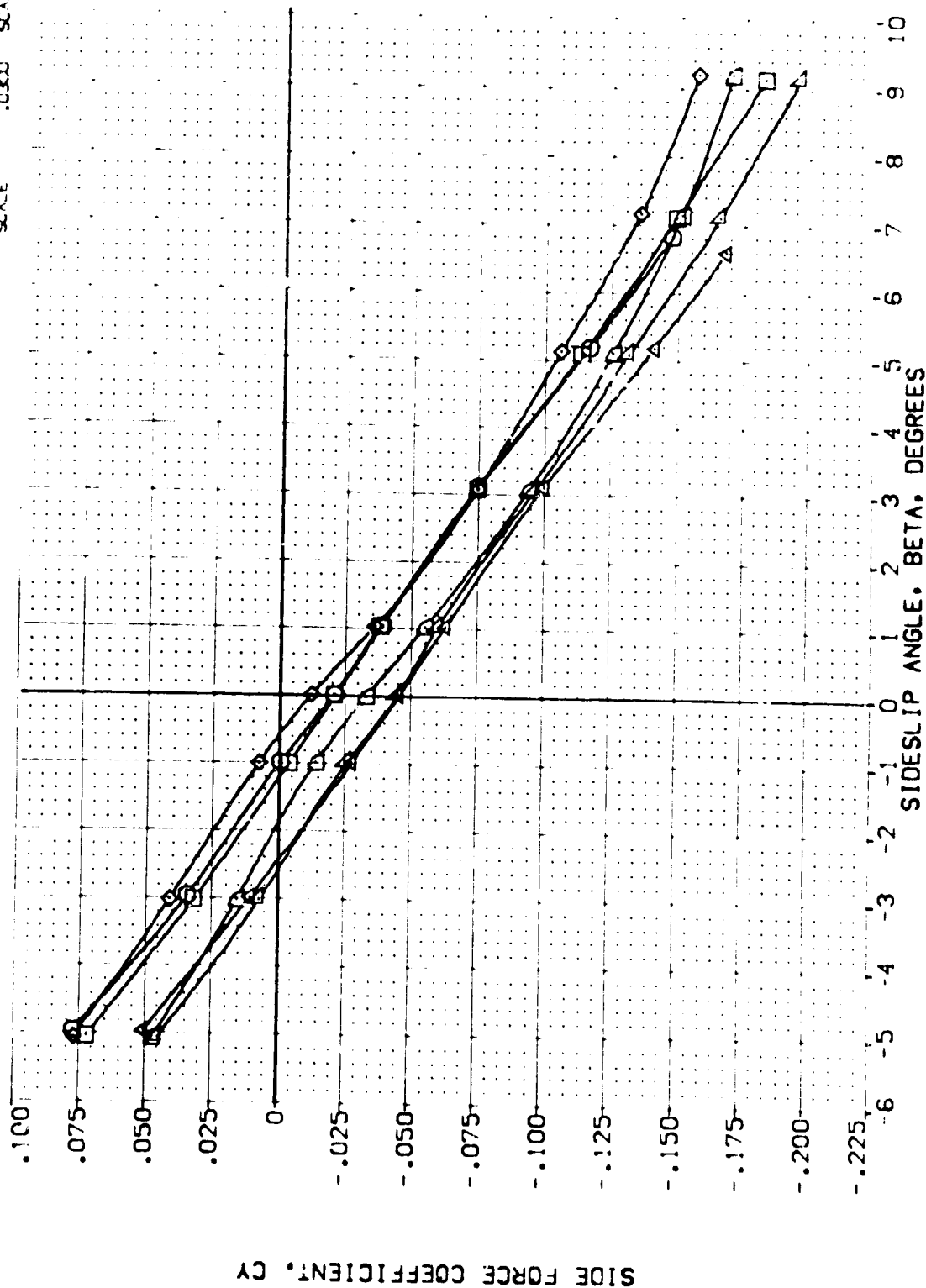


FIG. 20 RUDDER EFFECTS, SPEEDBRAKE 55 DEGREES

(C)MAC = 1.05



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BD/LAP	SPDRBK	REFERENCE INFORMATION
[AEJ035]	ARC 11-747 OAS3A B C M F VI V	0.000	-10.000	-11.700	55.000	SREF 2.4210 50. FT.
[AEJ036]	ARC 11-747 OAS3A B C M F VI V	10.000	-10.000	-11.700	55.000	LREF 14.2440 IN.
[AEJ037]	ARC 11-747 OAS3A B C M F VI V	20.000	-10.000	-11.700	55.000	BREF 28.1004 IN.
[AEJ051]	ARC 11-747 OAS3A B C M F VI V	10.000	-25.000	-11.700	55.000	XMRP 32.3010 IN.
[AEJ052]	ARC 11-747 OAS3A B C M F VI V	10.000	-25.000	-11.700	55.000	YMRP 11.0000 IN.
[AEJ053]	ARC 11-747 OAS3A B C M F VI V	20.000	-25.000	-11.700	55.000	ZMRP 11.2500 IN.
						SCALE .0300

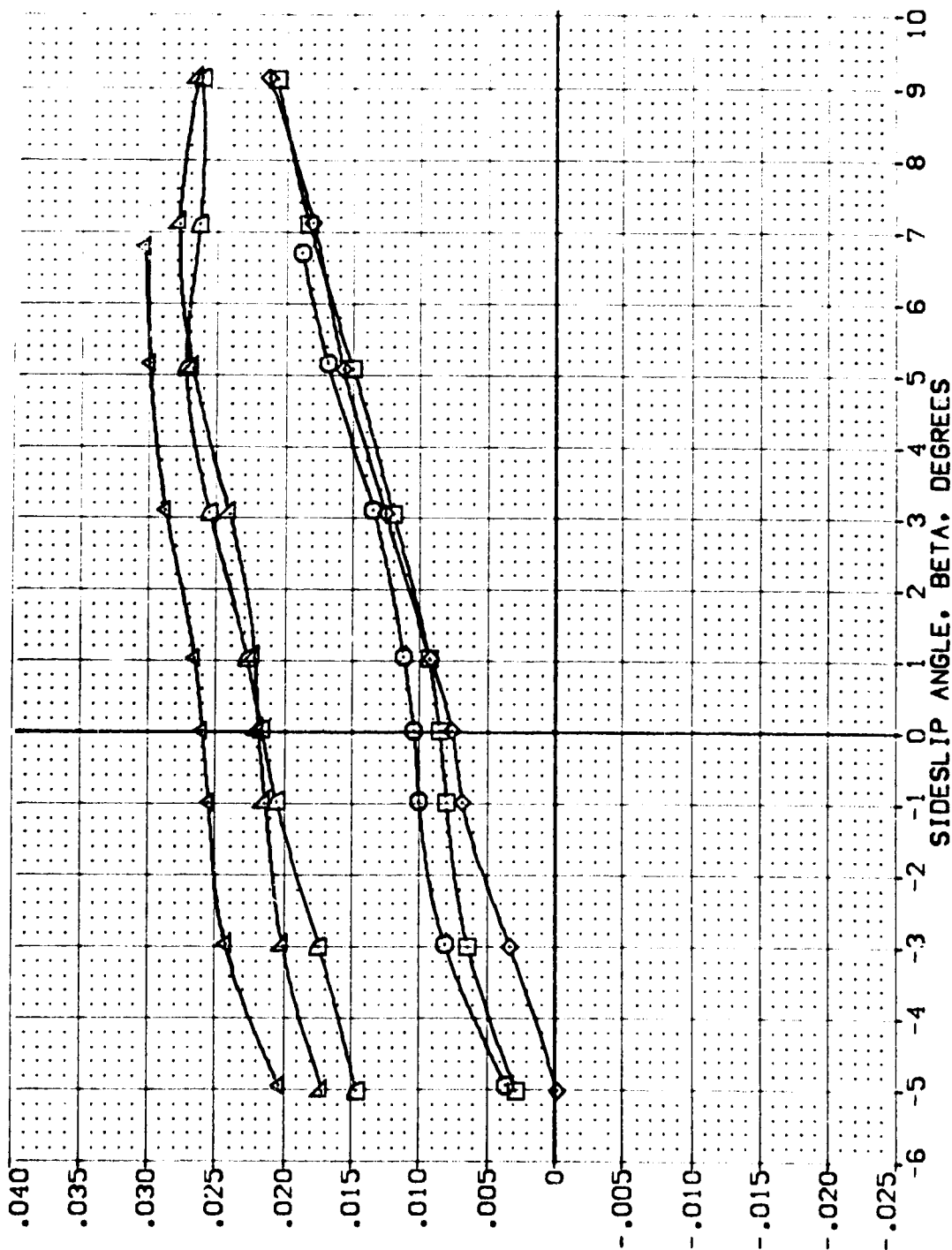


FIG. 20 RUDDER EFFECTS, SPEEDBRAKE 55 DEGREES

(A)MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NON.	RV/L	ALPHA	RUDDER	BD FLAP	SPEEDBRK	REFERENCE INFORMATION
[AEJ035]	ARC ---747 DA53A B C H F VI	NON.	RV/L	.000	-10.000	-11.700	55.000	SREF 2.4210 SQ.FT.
[AEJ036]	ARC ---747 DA53A B C H F VI	NON.	RV/L	10.000	-10.000	-11.700	55.000	LREF 14.2440 IN.
[AEJ037]	ARC ---747 DA53A B C H F VI	NON.	RV/L	20.000	-10.000	-11.700	55.000	BREF 28.1004 IN.
[AEJ051]	ARC ---747 DA53A B C H F VI	NON.	RV/L	10.000	-25.000	-11.700	55.000	XMRP 32.3010 IN.
[AEJ052]	ARC ---747 DA53A B C H F VI	NON.	RV/L	10.000	-25.000	-11.700	55.000	YMRP .0000 IN.
[AEJ053]	ARC ---747 DA53A B C H F VI	NON.	RV/L	20.000	-25.000	-11.700	55.000	ZMRP 11.2500 IN.
								SCALE .0300 SCALE

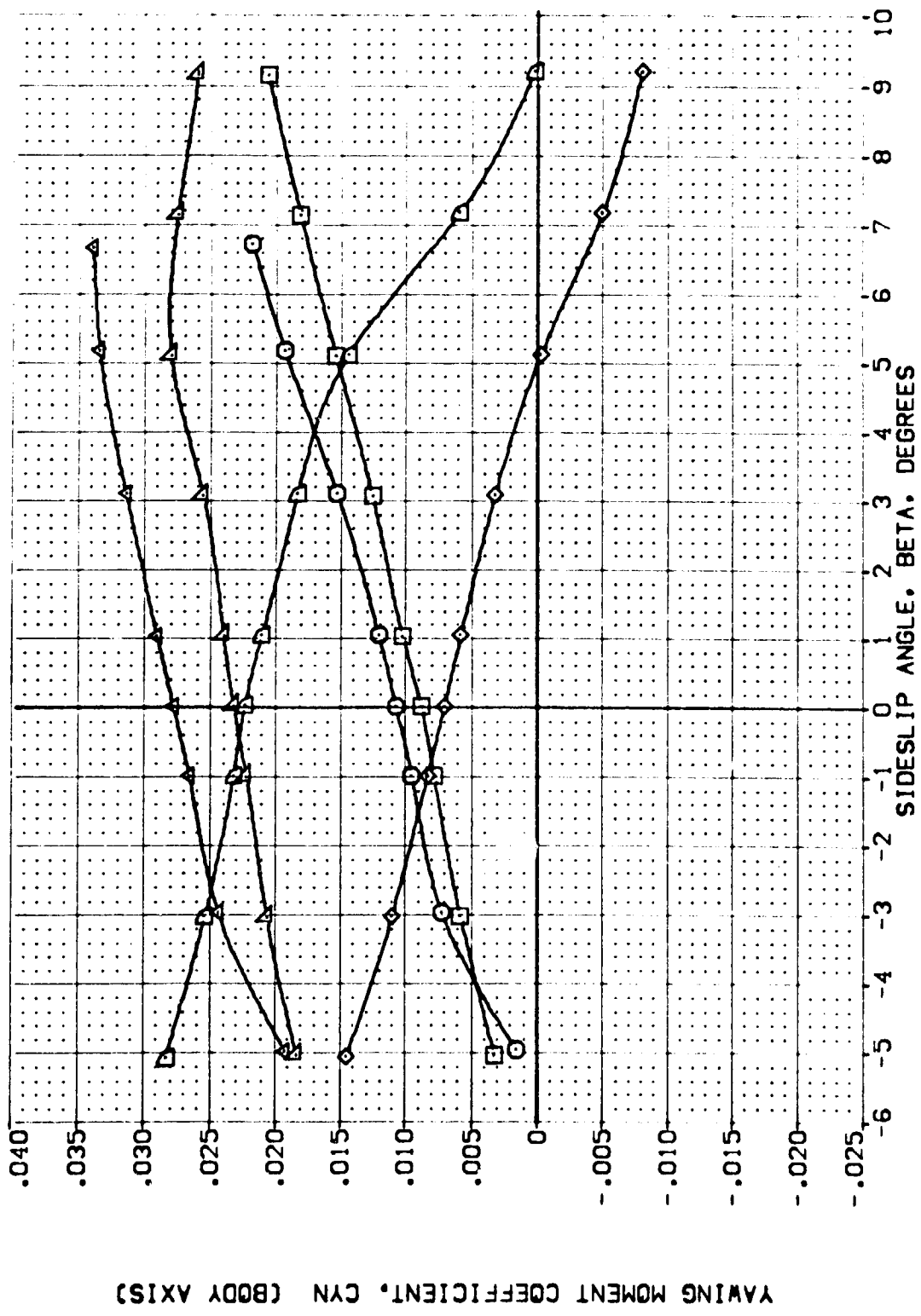


FIG. 20 RUDDER EFFECTS, SPEEDBRAKE 55 DEGREES

(B)MACH = .80



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPEED	REFERENCE INFORMATION
[AEJ035]	ARC 11-747 DAS3A B C M F VI	0.000	-10.000	-11.700	55.000	SREF 2.4210 50.000
[AEJ036]	ARC 11-747 DAS3A B C M F VI	10.000	-10.000	-11.700	55.000	LREF 14.2440 10.000
[AEJ037]	ARC 11-747 DAS3A B C M F VI	20.000	-10.000	-11.700	55.000	BREF 28.1004 10.000
[AEJ038]	ARC 11-747 DAS3A B C M F VI	10.000	-5.000	-11.700	55.000	XMRP 32.3010 10.000
[AEJ039]	ARC 11-747 DAS3A B C M F VI	10.000	-5.000	-11.700	55.000	YMRP 11.2500 10.000
[AEJ040]	ARC 11-747 DAS3A B C M F VI	20.000	-25.000	-11.700	55.000	SCALE .0300

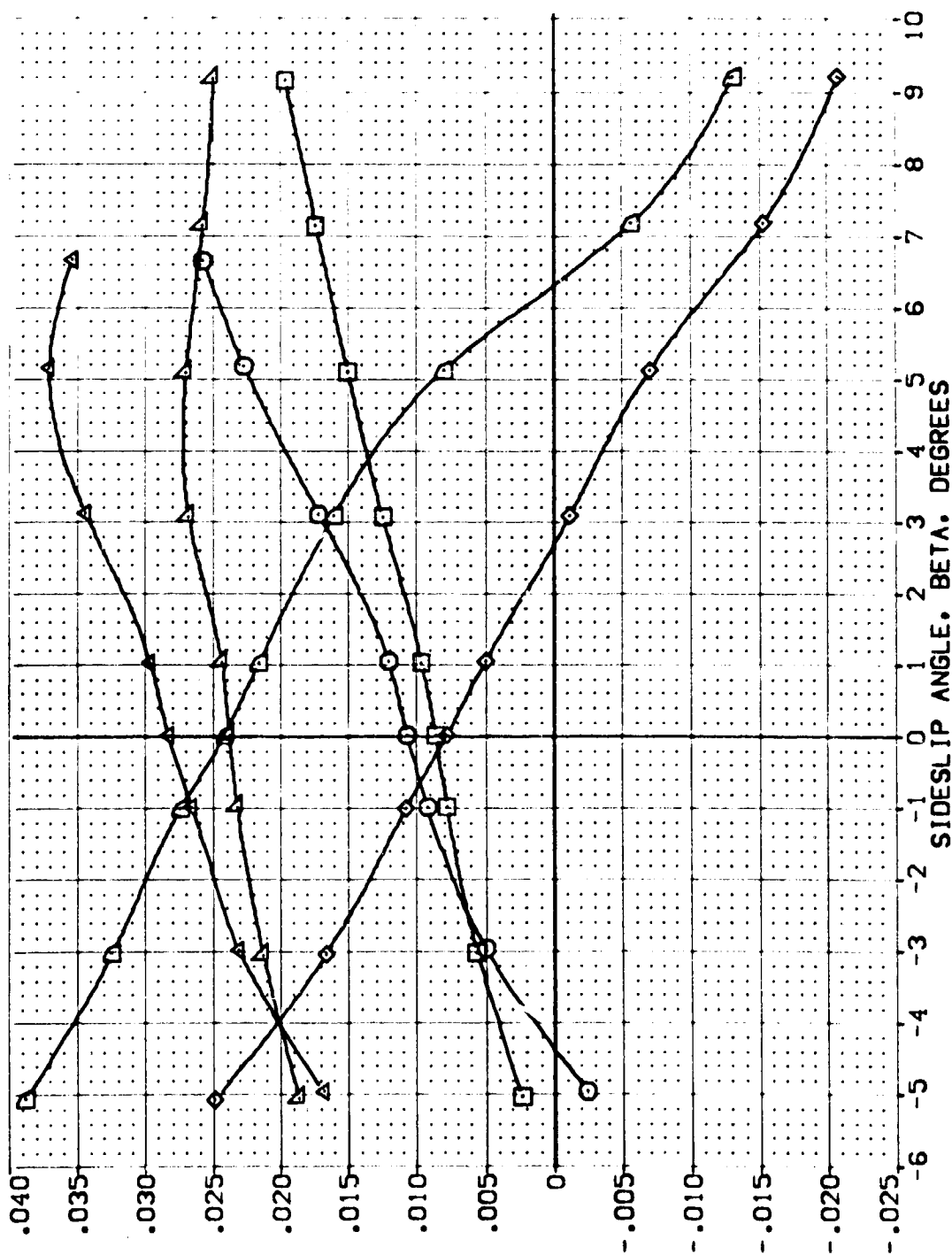


FIG. 20 RUDDER EFFECTS, SPEEDBRAKE 55 DEGREES

(C)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NO.	RV/L	ALPHA	RUDDER	80FLAP	SPOBRK	REFERENCE INFORMATION
[AE1036]	ARC 11-747 0A53A B C H F VI V	NO.	RV/L	.000	-10.000	-11.700	55.000	SREF 2.4210 SQ.FT.
[AE1036]	ARC 11-747 0A53A B C H F VI V	NO.	RV/L	10.000	-10.000	-11.700	55.000	LREF 14.2440 IN.
[AE1037]	ARC 11-747 0A53A B C H F VI V	NO.	RV/L	20.000	-10.000	-11.700	55.000	BREF 28.1004 IN.
[AE1051]	ARC 11-747 0A53A B C H F VI V	NO.	RV/L	10.000	-25.000	-11.700	55.000	XMRP 32.3010 IN.
[AE1052]	ARC 11-747 0A53A B C H F VI V	NO.	RV/L	20.000	-25.000	-11.700	55.000	YMRP 11.2500 IN.
[AE1053]	ARC 11-747 0A53A B C H F VI V	NO.	RV/L	20.000	-25.000	-11.700	55.000	SCALE .0300

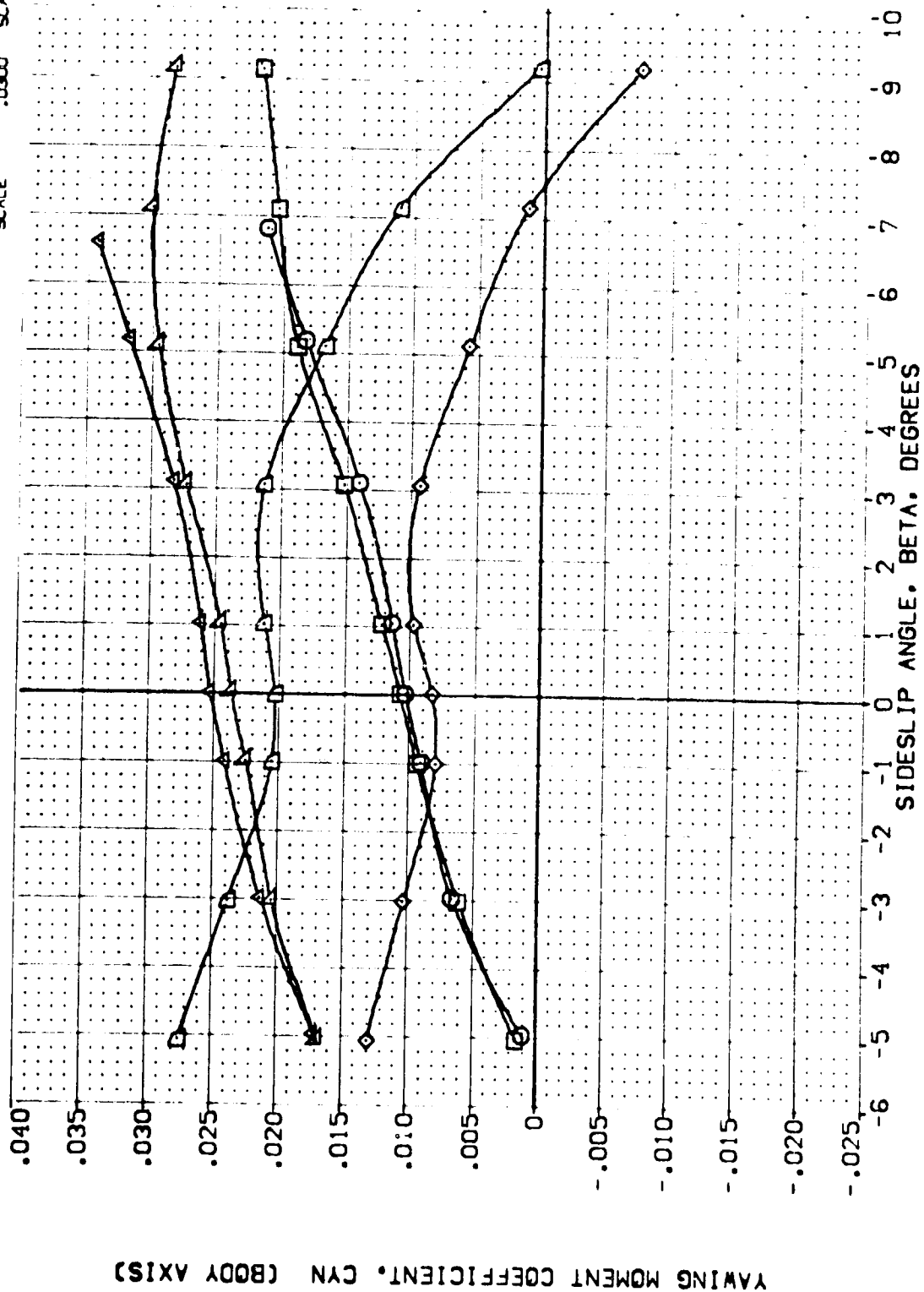


FIG. 20 RUDDER EFFECTS, SPEEDBRAKE 55 DEGREES

(0)MAC = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPEED	REFERENCE INFORMATION
[AEJ035]	ARC 11-747 DA53A B C M F V1 V	0.000	-10.000	-11.700	55.000	SREF 2.4210 SQ.FT.
[AEJ036]	ARC 11-747 DA53A B C M F V1 V	10.000	-10.000	-11.700	55.000	LREF 14.2440 IN.
[AEJ037]	ARC 11-747 DA53A B C M F V1 V	20.000	-10.000	-11.700	55.000	BREF 28.1004 IN.
[AEJ051]	ARC 11-747 DA53A B C M F V1 V	0.000	-25.000	-11.700	55.000	XMRP 32.3010 IN.
[AEJ052]	ARC 11-747 DA53A B C M F V1 V	10.000	-25.000	-11.700	55.000	YMRP 0.0000 IN.
[AEJ053]	ARC 11-747 DA53A B C M F V1 V	20.000	-25.000	-11.700	55.000	ZMRP 11.2500 IN.
					SCALE	0.0300

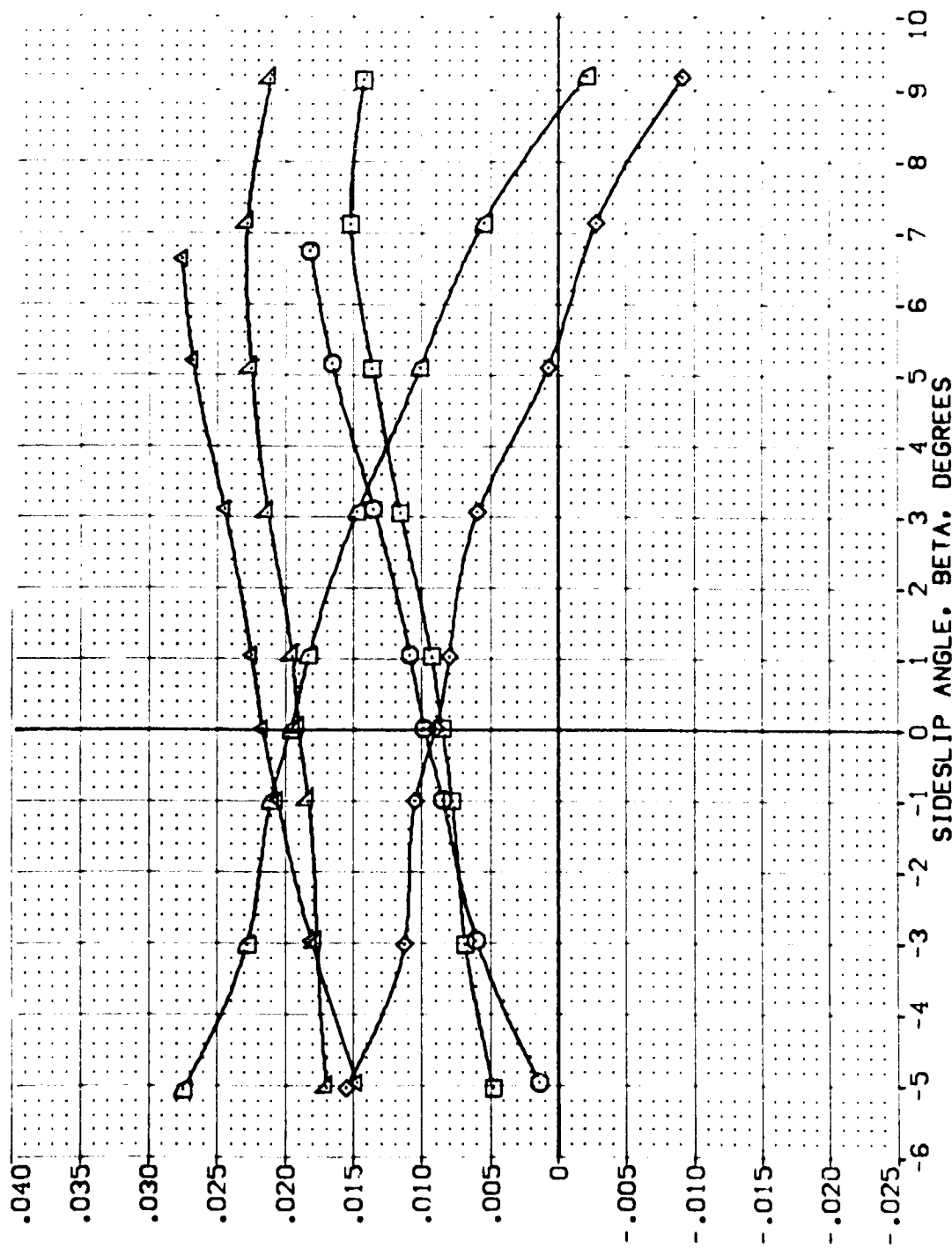


FIG. 20 RUDDER EFFECTS, SPEEDBRAKE 55 DEGREES

(E)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BDFLAP	SPOBRK	REFERENCE INFORMATION
(AE1035)	ARC 11-747 DA53A B C H F V	0.000	-10.000	-11.700	55.000	SREF 2.421C SQ.FT.
(AE1036)	ARC 11-747 DA53A B C H F V	10.000	-10.000	-11.700	55.000	LREF 14.244C
(AE1037)	ARC 11-747 DA53A B C H F V	20.000	-10.000	-11.700	55.000	BREF 28.100C
(AE1051)	ARC 11-747 DA53A B C H F V	10.000	-25.000	-11.700	55.000	YMRP 32.301C
(AE1052)	ARC 11-747 DA53A B C H F V	10.000	-25.000	-11.700	55.000	ZMRP 11.250C
(AE1053)	ARC 11-747 DA53A B C H F V	20.000	-25.000	-11.700	55.000	SCALE 0.030C SCALE

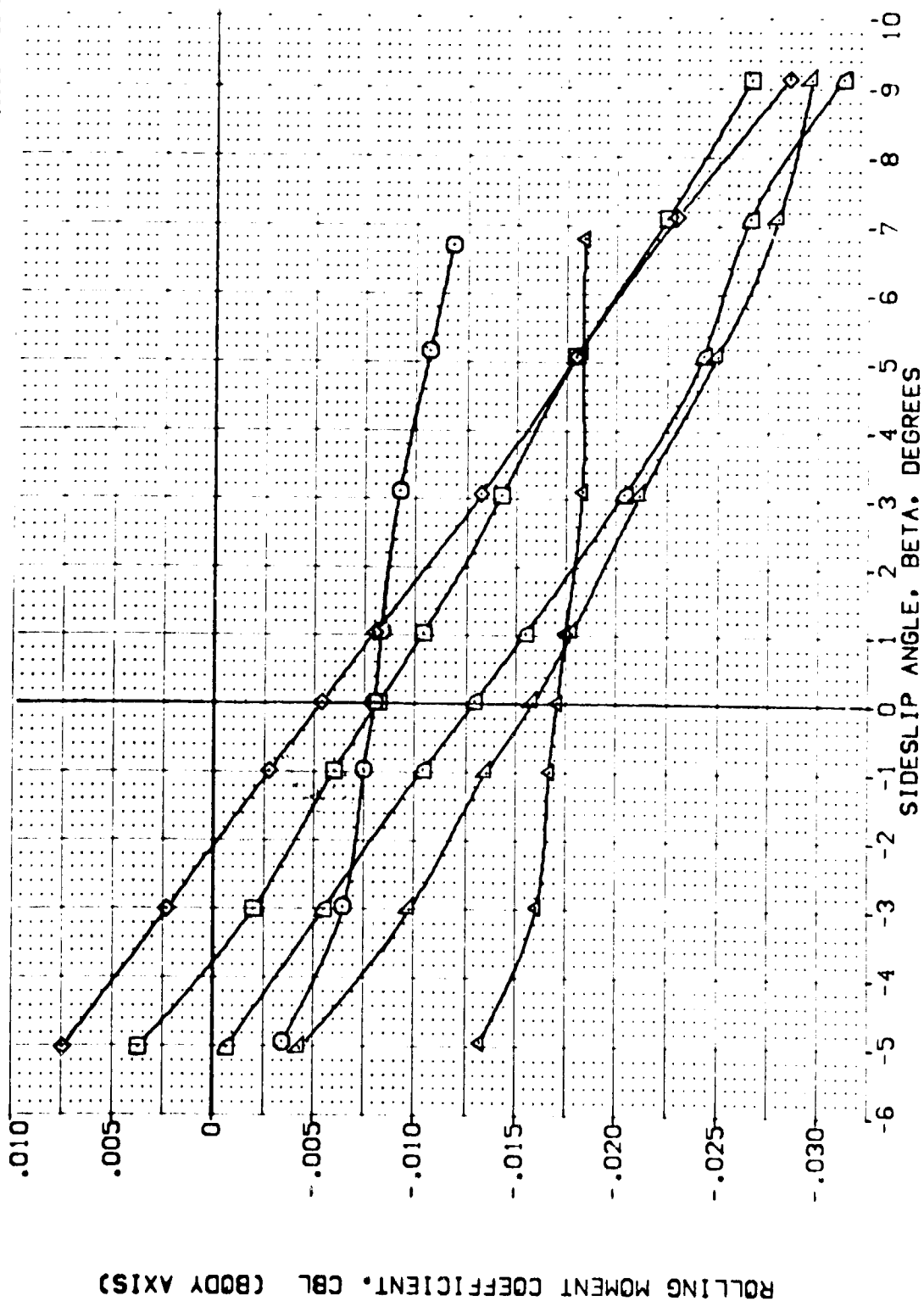


FIG. 20 RUDDER EFFECTS, SPEEDBRAKE 55 DEGREES

(A)MAC = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	Y	NO.	ALPHA	RUDDER	BDF LAP	SPOBRK	REFERENCE INFORMATION
(AEJ035)	ARC 11-747 DA53A B C M F VI	V	NO.	0.000	-10.000	-11.700	55.000	SREF 2.4210 SC.F.T.
(AEJ036)	ARC 11-747 DA53A B C M F VI	V	NO.	10.000	-10.000	-11.700	55.000	LREF 14.2440 IN.
(AEJ037)	ARC 11-747 DA53A B C M F VI	V	NO.	20.000	-10.000	-11.700	55.000	BREF 28.1004 IN.
(AEJ051)	ARC 11-747 DA53A B C M F VI	V	NO.	10.000	-25.000	-11.700	55.000	XMRP 32.3010 IN.
(AEJ052)	ARC 11-747 DA53A B C M F VI	V	NO.	10.000	-25.000	-11.700	55.000	YMRP 11.7500 IN.
(AEJ053)	ARC 11-747 DA53A B C M F VI	V	NO.	20.000	-25.000	-11.700	55.000	ZMRP 11.7500 IN.
								SCALE

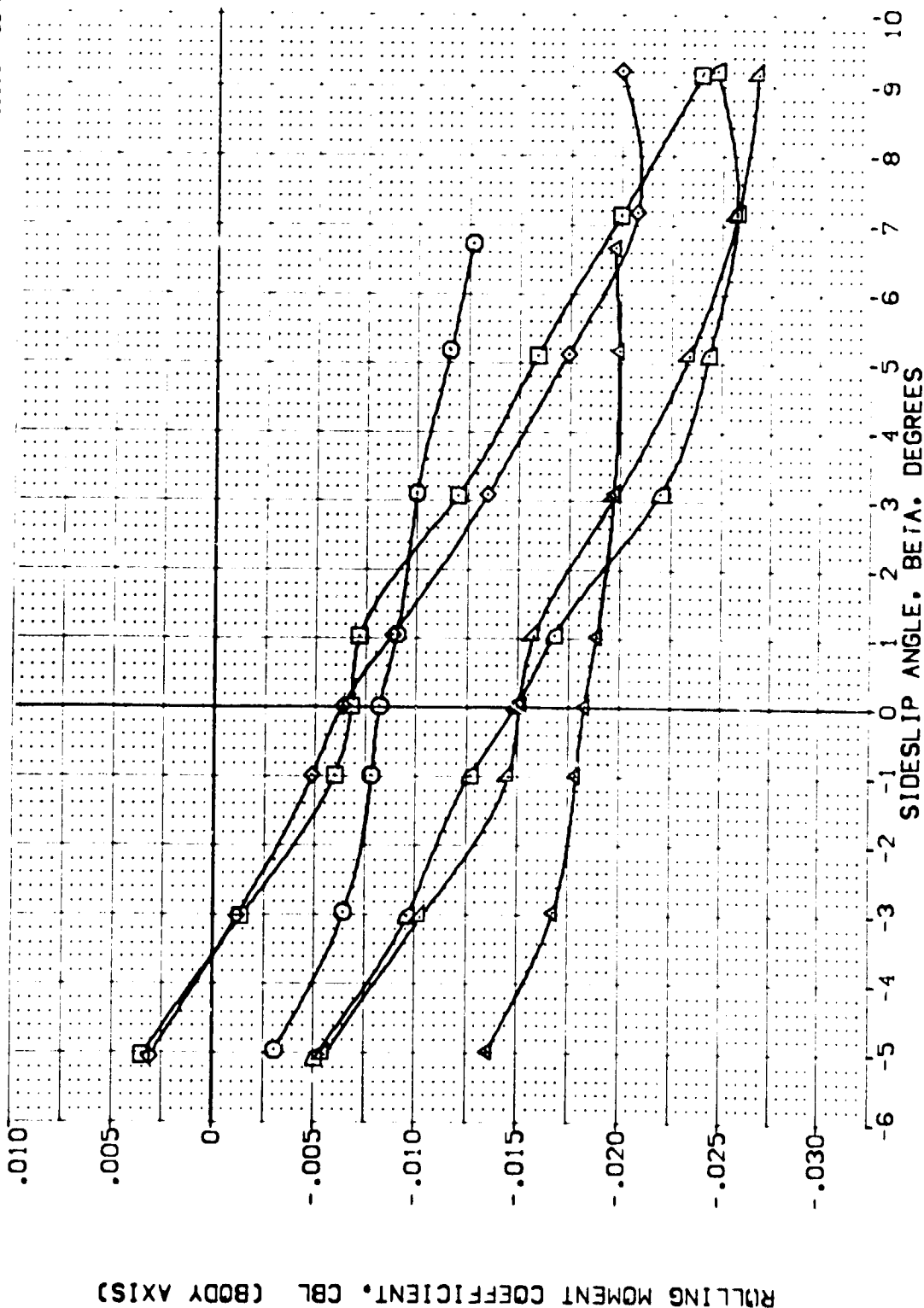


FIG. 20 RUDDER EFFECTS, SPEEDBRAKE 55 DEGREES

(B)MAC = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPOBRK	REFERENCE INFORMATION
{AEJ053}	ARC 11-747 DAS3A B C H F VI	0.000	-10.000	-11.700	55.000	SREF 2.4210 SQ.FT.
{AEJ056}	ARC 11-747 DAS3A B C H F VI	10.000	-10.000	-11.700	55.000	LREF 14.2440 IN.
{AEJ057}	ARC 11-747 DAS3A B C H F VI	20.000	-10.000	-11.700	55.000	BREF 28.1004 IN.
{AEJ051}	ARC 11-747 DAS3A B C H F VI	10.000	-25.000	-11.700	55.000	YMRP 32.3010 IN.
{AEJ052}	ARC 11-747 DAS3A B C H F VI	10.000	-25.000	-11.700	55.000	ZMRP 11.2500 IN.
{AEJ053}	ARC 11-747 DAS3A B C H F VI	20.000	-25.000	-11.700	55.000	ZMRP 11.2500 IN.

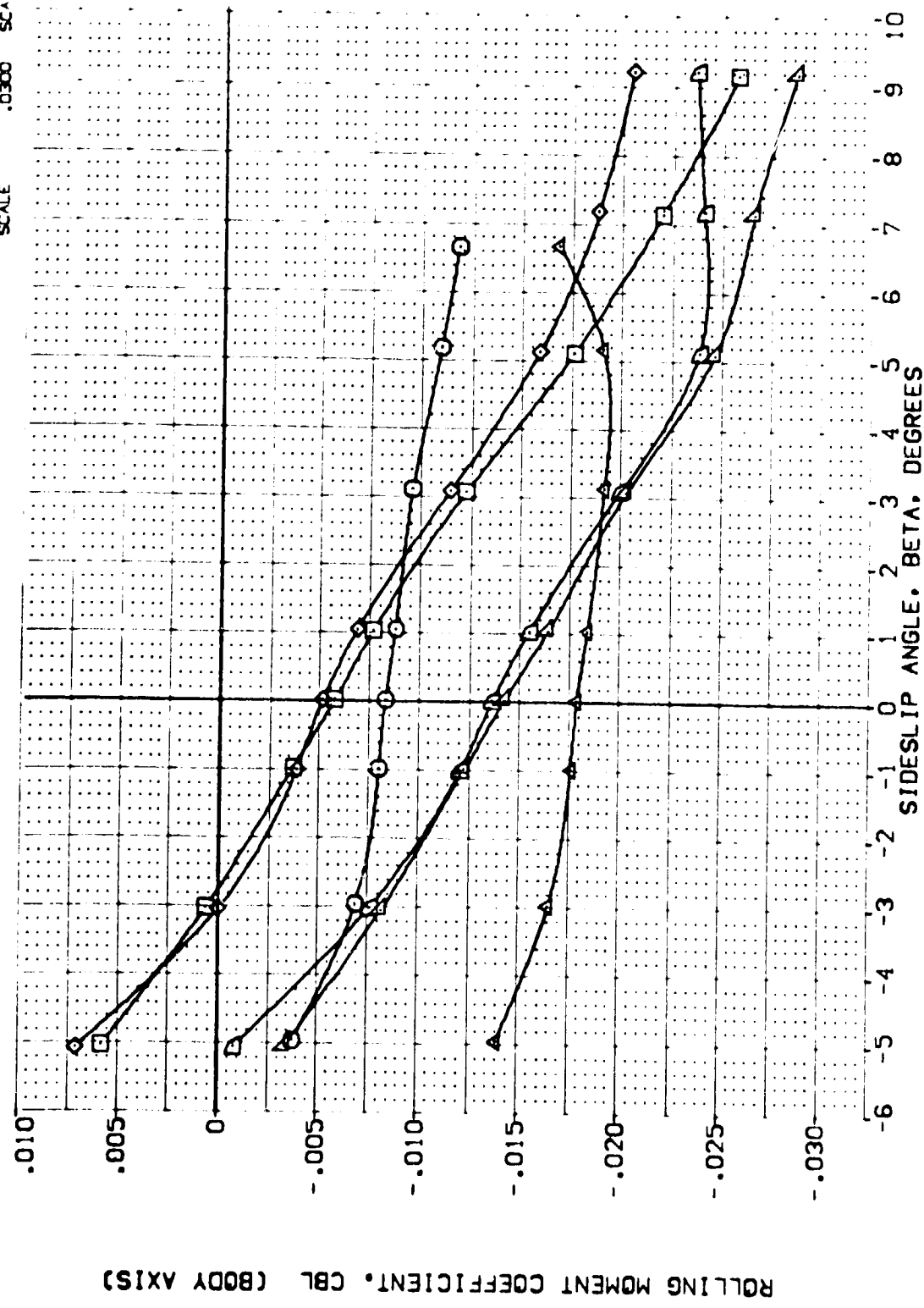


FIG. 20 RUDDER EFFECTS, SPEEDBRAKE 55 DEGREES

(C)MAC = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	REF. INFO	SCALE
[AEJ036]	ARC 11-747 OAS3A B C F F VI	SREF 2.4210	50. FT.
[AEJ036]	ARC 11-747 OAS3A B C F F VI	LREF 14.2440	IN.
[AEJ037]	ARC 11-747 OAS3A B C F F VI	BREF 28.1004	IN.
[AEJ051]	ARC 11-747 OAS3A B C F F VI	XMRP 32.3010	IN.
[AEJ052]	ARC 11-747 OAS3A B C F F VI	YMRP 11.2500	IN.
[AEJ053]	ARC 11-747 OAS3A B C F F VI	ZMRP 11.2500	IN.
		SCALE	.0300

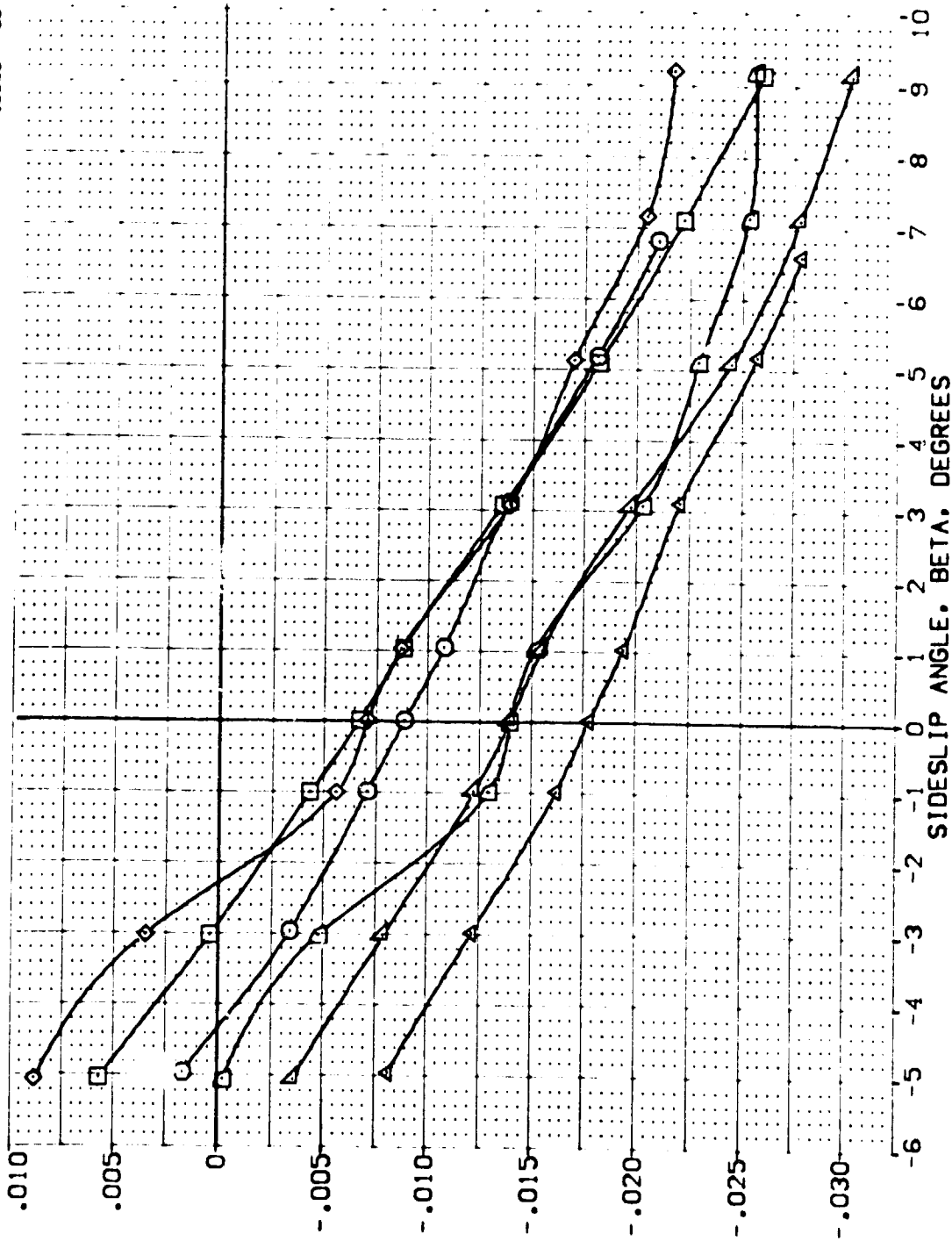


FIG. 20 RUDDER EFFECTS, SPEEDBRAKE 55 DEGREES

(C)MACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NON-ROLL	ALPHA	RUDDER	BOFLAP	SPOBRK	REFERENCE INFORMATION
[AEJ035]	ARC 11-747 DA53A B C H F VI V	NON-ROLL	0.000	-10.000	-11.700	55.000	SREF 2.4210 50. FT.
[AEJ036]	ARC 11-747 DA53A B C H F VI V	NON-ROLL	10.000	-10.000	-11.700	55.000	LREF 14.2440 IN.
[AEJ037]	ARC 11-747 DA53A B C H F VI V	NON-ROLL	20.000	-10.000	-11.700	55.000	BREF 28.1004 IN.
[AEJ051]	ARC 11-747 DA53A B C H F VI V	NON-ROLL	10.000	-25.000	-11.700	55.000	XMRP 32.2010 IN.
[AEJ052]	ARC 11-747 DA53A B C H F VI V	NON-ROLL	10.000	-25.000	-11.700	55.000	YMRP 11.2500 IN.
[AEJ053]	ARC 11-747 DA53A B C H F VI V	NON-ROLL	10.000	-25.000	-11.700	55.000	ZMRP 11.2500 IN.
							SCALE 0.000

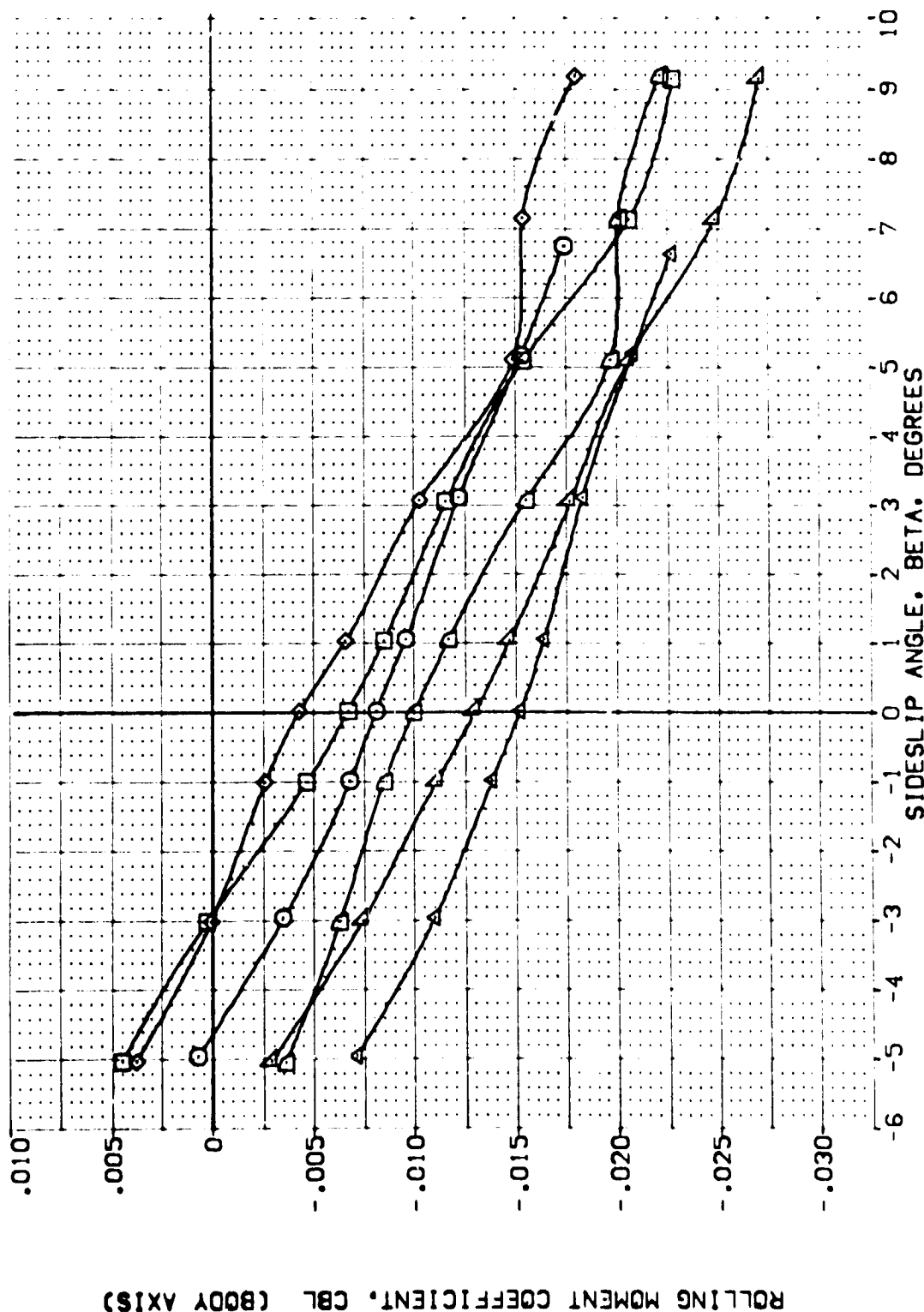


FIG. 20 RUDDER EFFECTS, SPEEDBRAKE 55 DEGREES

(E)MAC = 1.20



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BD/LAP	SPDBRK	REFERENCE INFORMATION
{AEJ046}	ARC 11-747 BA53A B C H F V	.000	-10.000	-11.700	85.000	SREF 2.4210 SQ.FT.
{AEJ047}	ARC 11-747 BA53A B C H F V	10.000	-10.000	-11.700	85.000	LREF 14.2440
{AEJ048}	ARC 11-747 BA53A B C H F V	20.000	-10.000	-11.700	85.000	BREF 28.1004
						ZREF 32.3010
						XMRP .0000
						YMRP .0000
						ZMRP 11.2500 IN.
						SCALE .0300

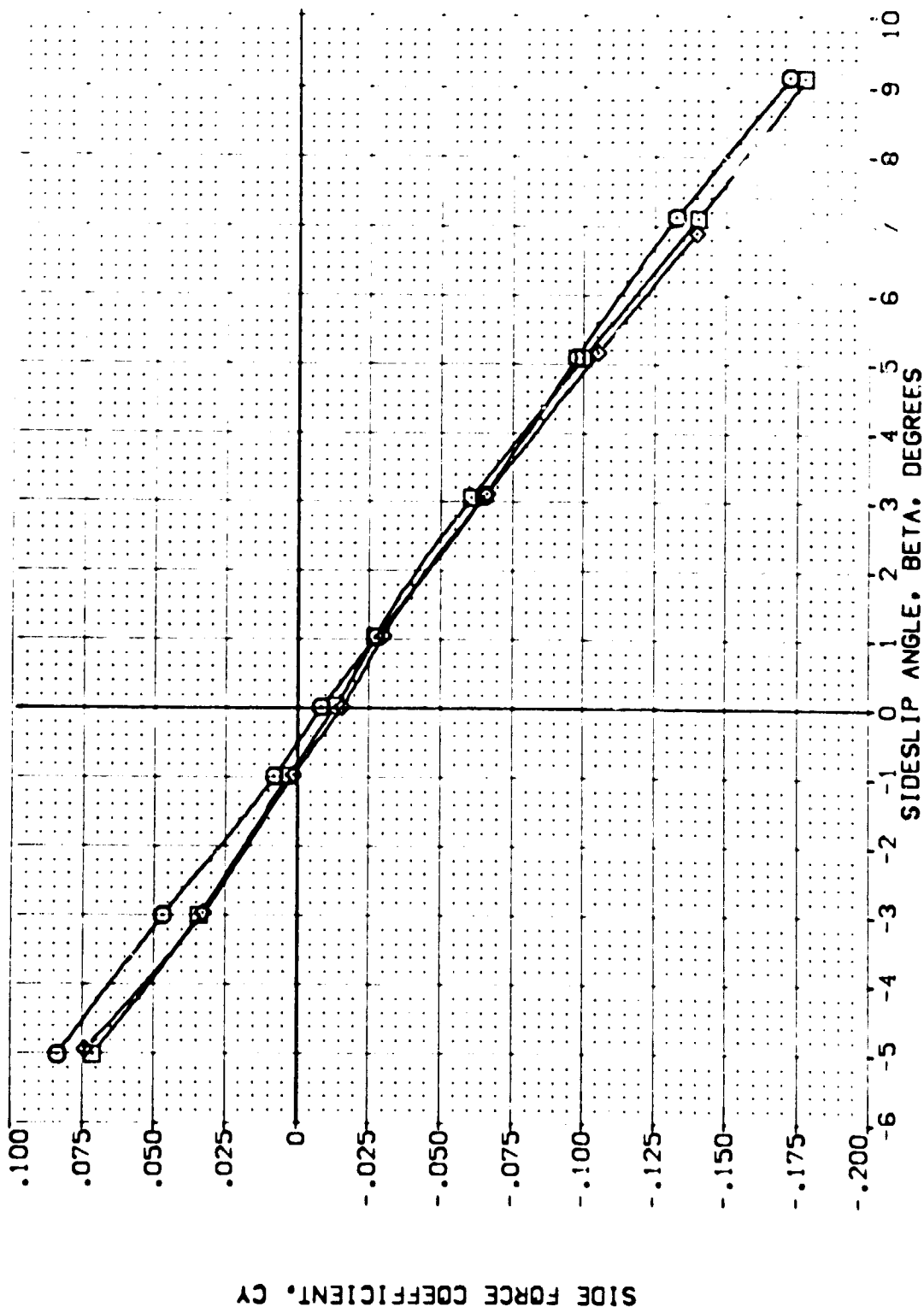


FIG. 21 RUDDER EFFECTS, SPEEDBRAKE 85 DEGREES

(A)MAC = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BD FLAP	SPEEDBRAKE	REFERENCE INFORMATION
(AEJ046)	ARC 11-747 BA53A B C M F V	0.000	-10.000	-11.700	85.000	SREF 2.4210 SQ. FT.
(AEJ047)	ARC 11-747 BA53A B C M F V	10.000	-10.000	-11.700	85.000	LREF 14.2440
(AEJ048)	ARC 11-747 BA53A B C M F V	20.000	-10.000	-11.700	85.000	BREF 28.1004
						XMRP 32.3010
						YMRP 0.0000
						ZMRP 11.2500
						SCALE 0.0000

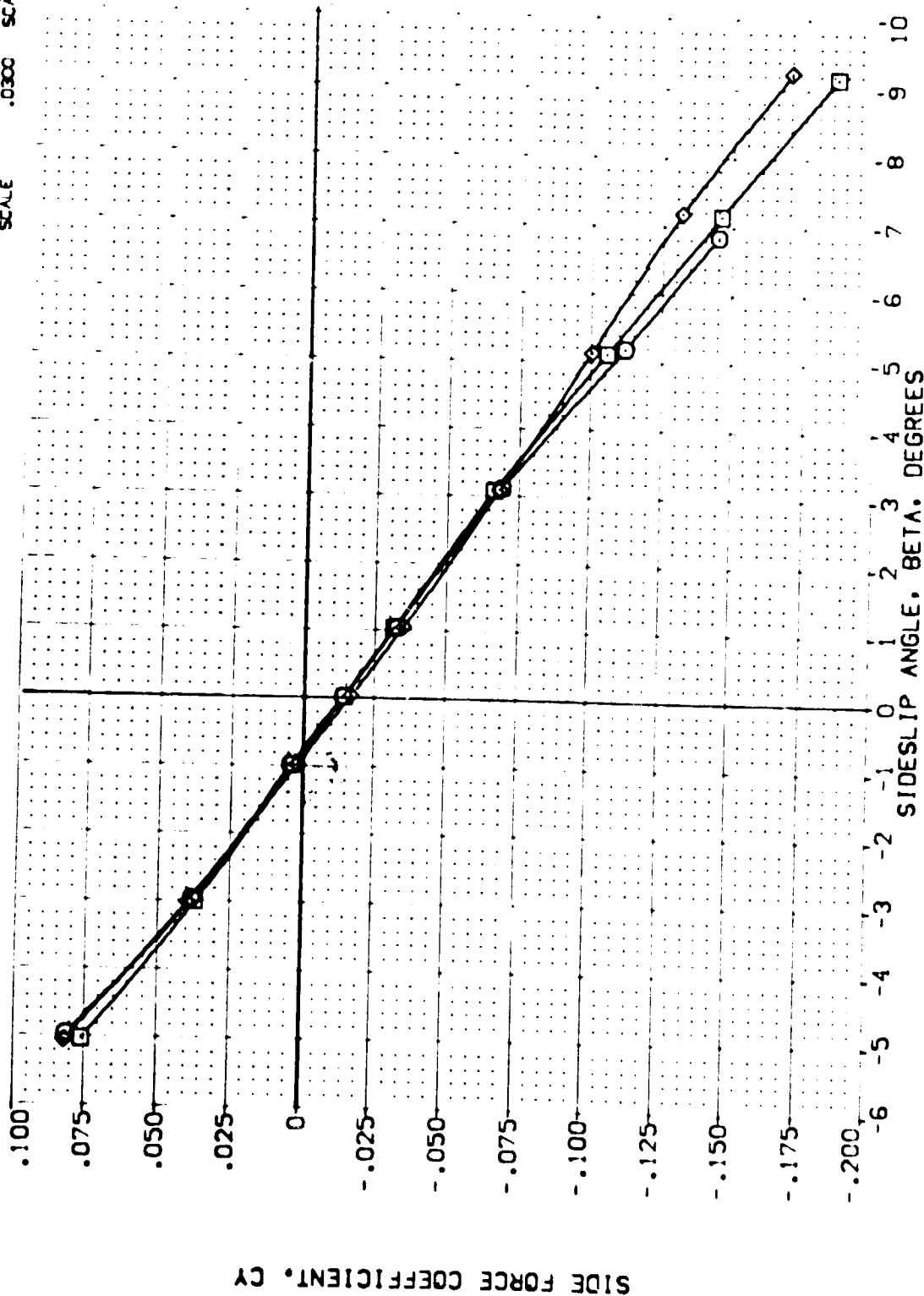


FIG. 21 RUDDER EFFECTS, SPEEDBRAKE 85 DEGREES

(B)  $\gamma_{AC} = .80$

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	SDFLAP	SPOBRK	REFERENCE INFORMATION
[AEJ048]	ARC 11-747 QAS3A B C H F VI V	.000	-10.000	-11.700	85.000	SREF 2.4210 SO.FT.
[AEJ048]	ARC 11-747 QAS3A B C H F VI V	10.000	-10.000	-11.700	85.000	LREF 14.2440 IN.
[AEJ048]	ARC 11-747 QAS3A B C H F VI V	20.000	-10.000	-11.700	85.000	BREF 28.1004 IN.
						VREF 32.3010 IN.
						YREF 11.7500 IN.
						ZREF .0300 IN.
						SCALE

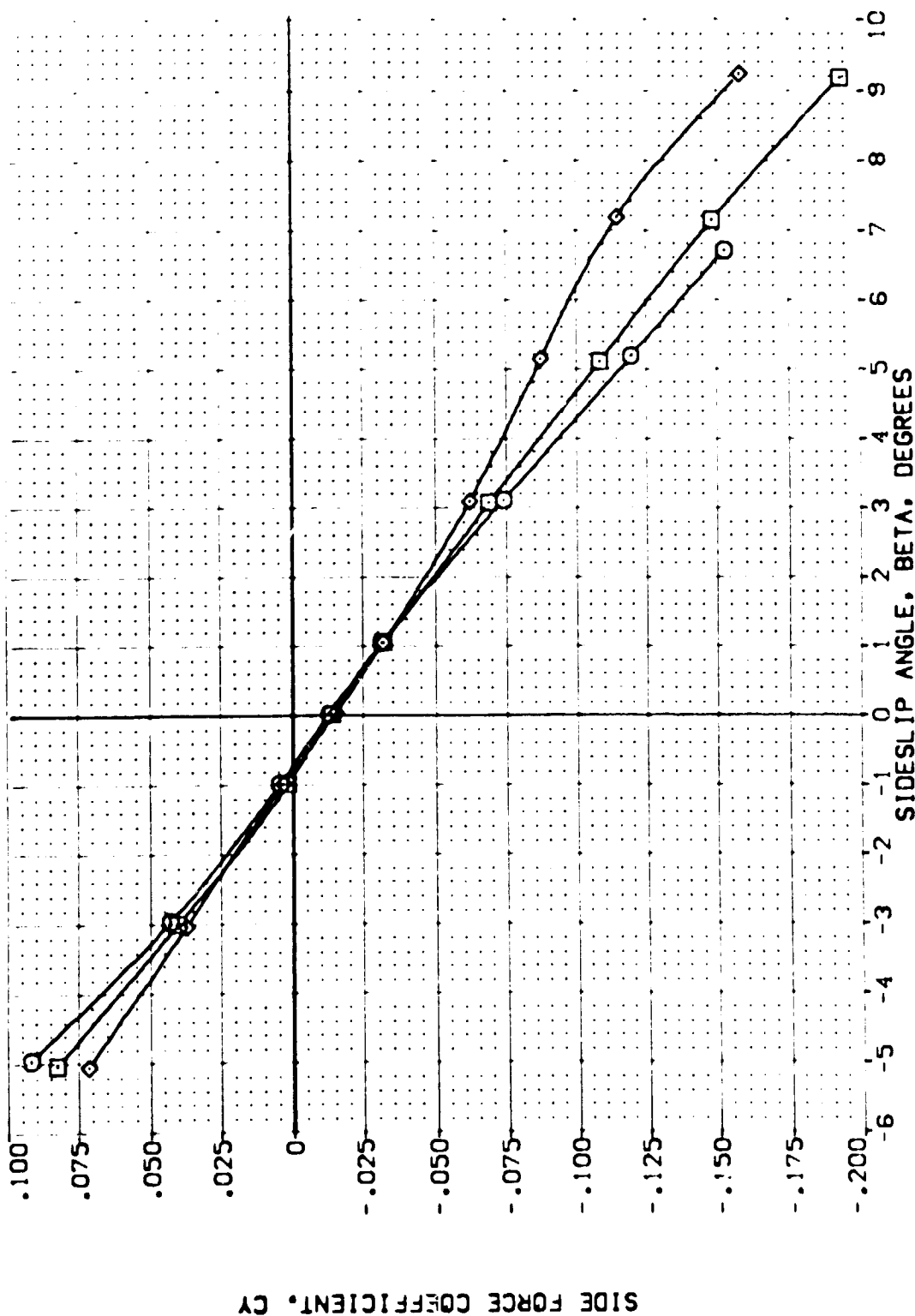


FIG. 21 RUDDER EFFECTS, SPEEDBRAKE 85 DEGREES

(C)MAC = .91

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPOBRK	REFERENCE INFORMATION
{AE1046}	○	ARC 11-747 DAS3A B C H F V	10.000	-10.000	-11.700	85.000	SREF 2.4210 SQ.FT.
{AE1047}	○	ARC 11-747 DAS3A B C H F V	10.000	-10.000	-11.700	85.000	LREF 14.2440 IN.
{AE1048}	◇	ARC 11-747 DAS3A B C H F V	20.000	-10.000	-11.700	85.000	BREF 28.1004 IN.
							XMRP 32.3010 IN.
							YMRP 11.0000 IN.
							ZMRP 11.2500 IN.
							SCALE .0300

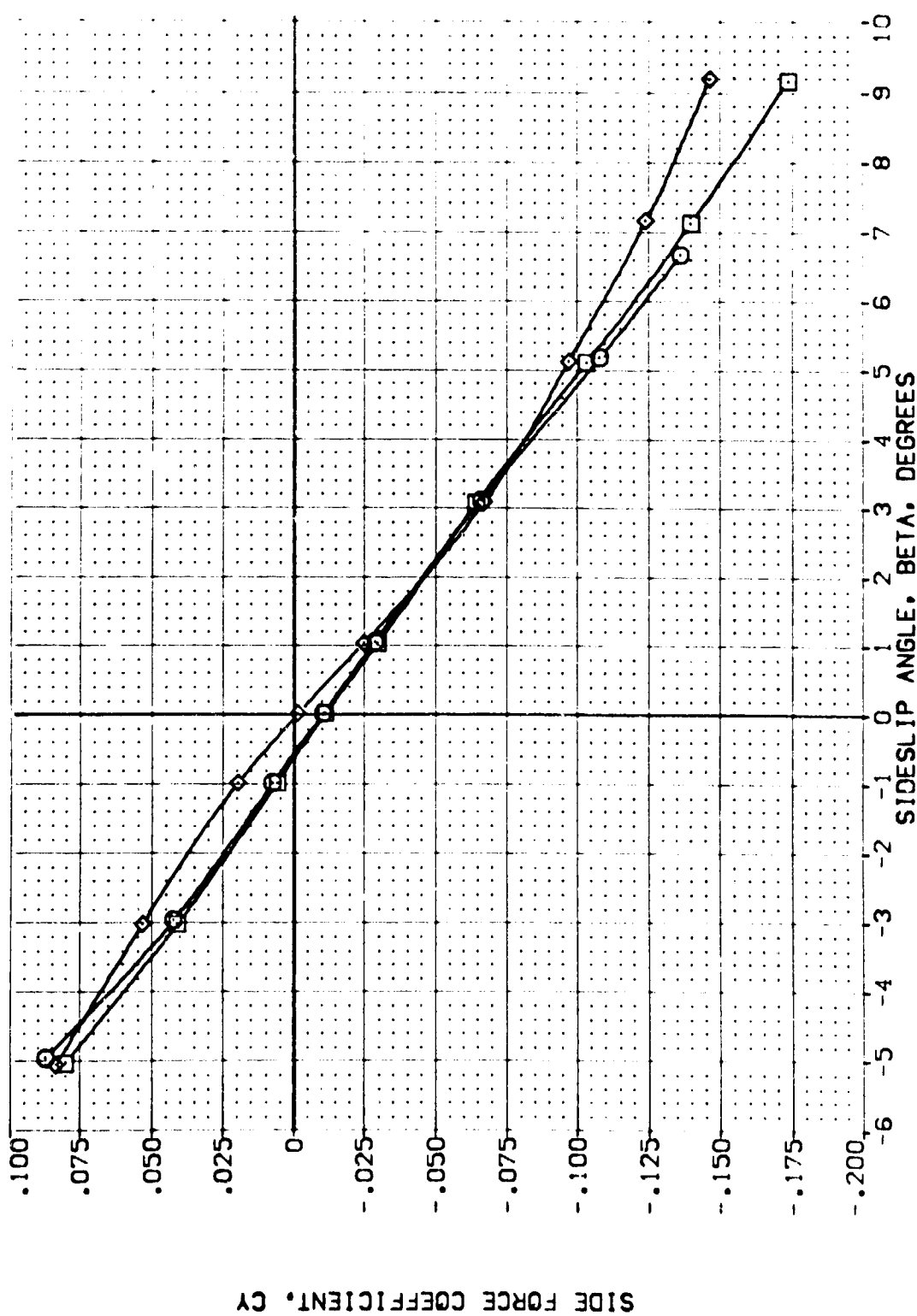


FIG. 21 RUDDER EFFECTS, SPEEDBRAKE 85 DEGREES

(C)MACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPEEDBRK	REFERENCE INFORMATION
[AEJ046]	ARC 11-747 BA53A B C M F VI V	.000	-10.000	-11.700	85.000	SREF 2.4210 SQ.FT.
[AEJ047]	ARC 11-747 BA53A B C M F VI V	10.000	-10.000	-11.700	85.000	LREF 14.2440 IN.
[AEJ048]	ARC 11-747 BA53A B C M F VI V	20.000	-10.000	-11.700	85.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

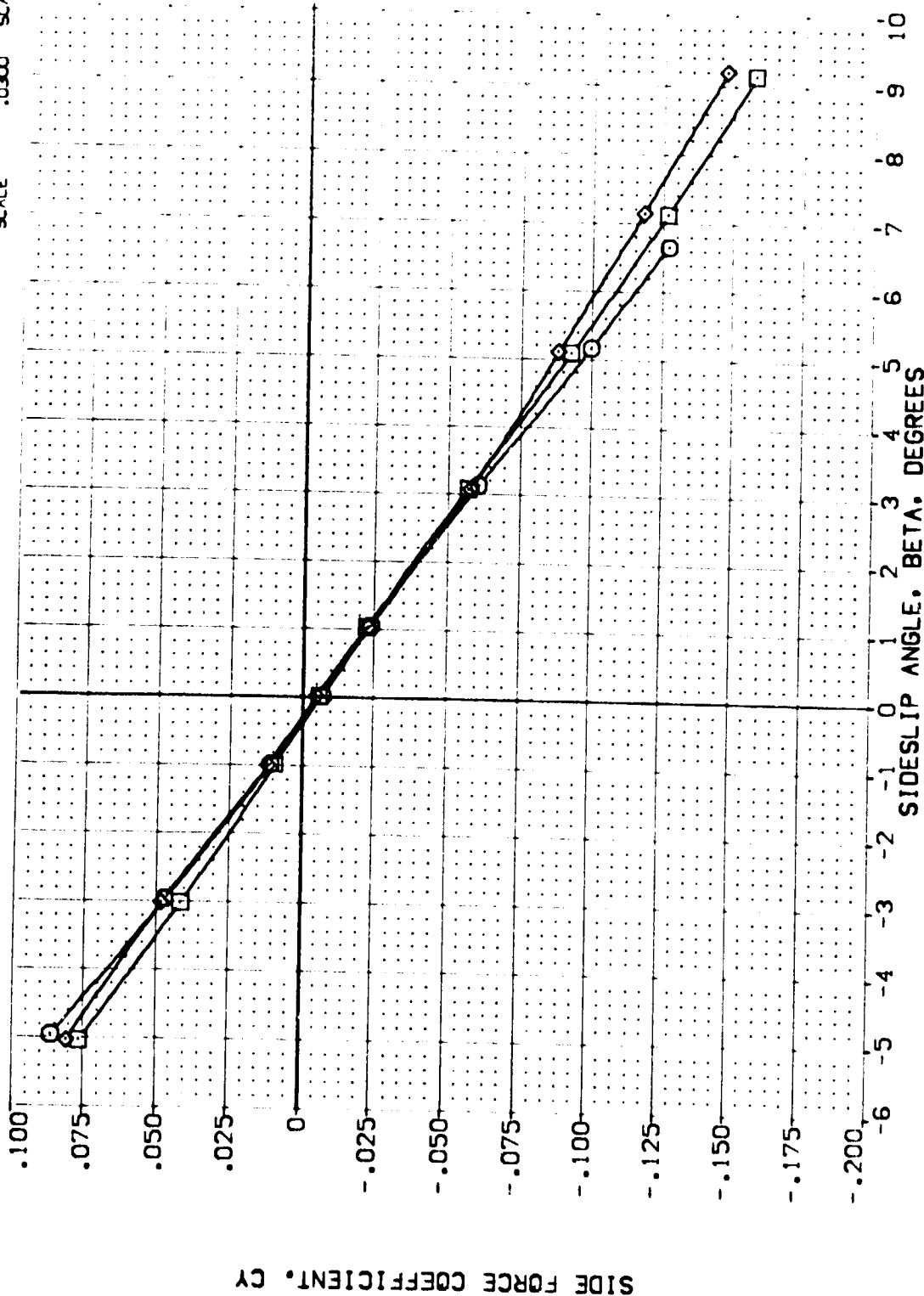


FIG. 21 RUDDER EFFECTS, SPEEDBRAKE 85 DEGREES

(E)MAC = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BD/LAP	SPDBRAK	REFERENCE INFORMATION
[AEJ046]	ARC 11-747 BAS3A B C M F V	0.000	-10.000	-11.700	85.000	2.4210 50. FT.
[AEJ047]	ARC 11-747 BAS3A B C M F V	10.000	-10.000	-11.700	85.000	14.2440
[AEJ048]	ARC 11-747 BAS3A B C M F V	20.000	-10.000	-11.700	85.000	28.1004
						32.3010
						11.2500
						SCALE

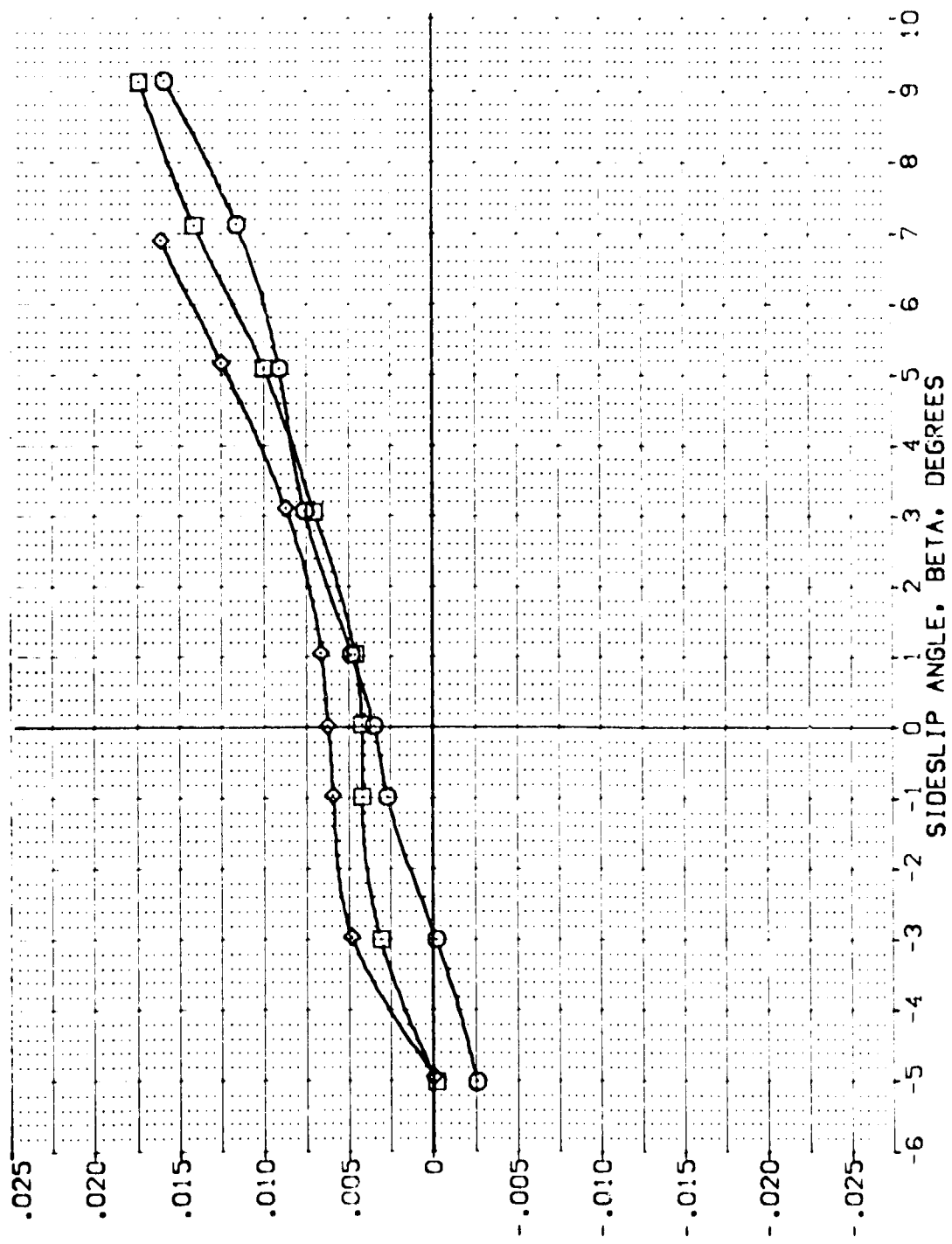


FIG. 21 RUDDER EFFECTS, SPEEDBRAKE 85 DEGREES

CADMAC = .60

DATA SET SYMBOL    CONFIGURATION DESCRIPTION    ALPHA    RUDDER    BDF LAP    SPEEDBRK    REFERENCE INFORMATION

[AEJ046]	ARC 11-747 BAS3A B C M F V1 V	0.000	-10.000	-11.700	85.000	SREF 2.4210 50.000
[AEJ047]	ARC 11-747 BAS3A B C M F V1 V	10.000	-10.000	-11.700	85.000	LREF 14.2440 10.000
[AEJ048]	ARC 11-747 BAS3A B C M F V1 V	20.000	-10.000	-11.700	85.000	BREF 28.1004 10.000
						XMRP 32.3010 10.000
						ZMRP 11.2500 10.000
						SCALE .0300 SCALE

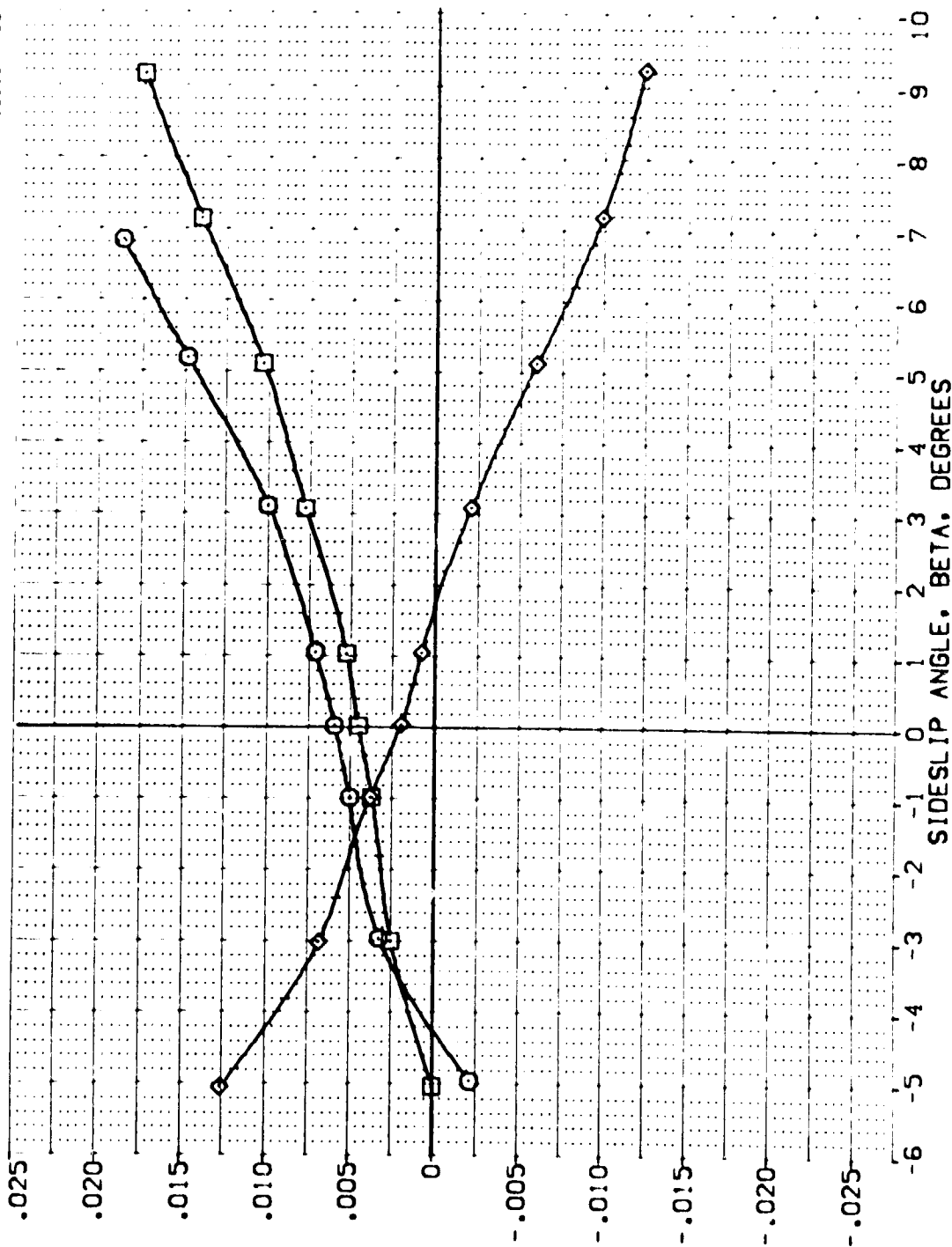


FIG. 21 RUDDER EFFECTS, SPEEDBRAKE 85 DEGREES

(B)MAC = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	ROFLAP	SPODBRK	REFERENCE INFORMATION	
(AEJ046)	ARC 11-747 CAS3A B C H F V1 V	.000	-10.000	-11.700	85.000	SREF	2.4210 SQ.FT.
(AEJ047)	ARC 11-747 CAS3A B C H F V1 V	10.000	-10.000	-11.700	85.000	LREF	14.2440
(AEJ048)	ARC 11-747 CAS3A B C H F V1 V	20.000	-10.000	-11.700	85.000	BREF	28.1004
						XMRP	32.3010
						YMRP	.0000
						ZMRP	11.2500
						SCALE	.0300

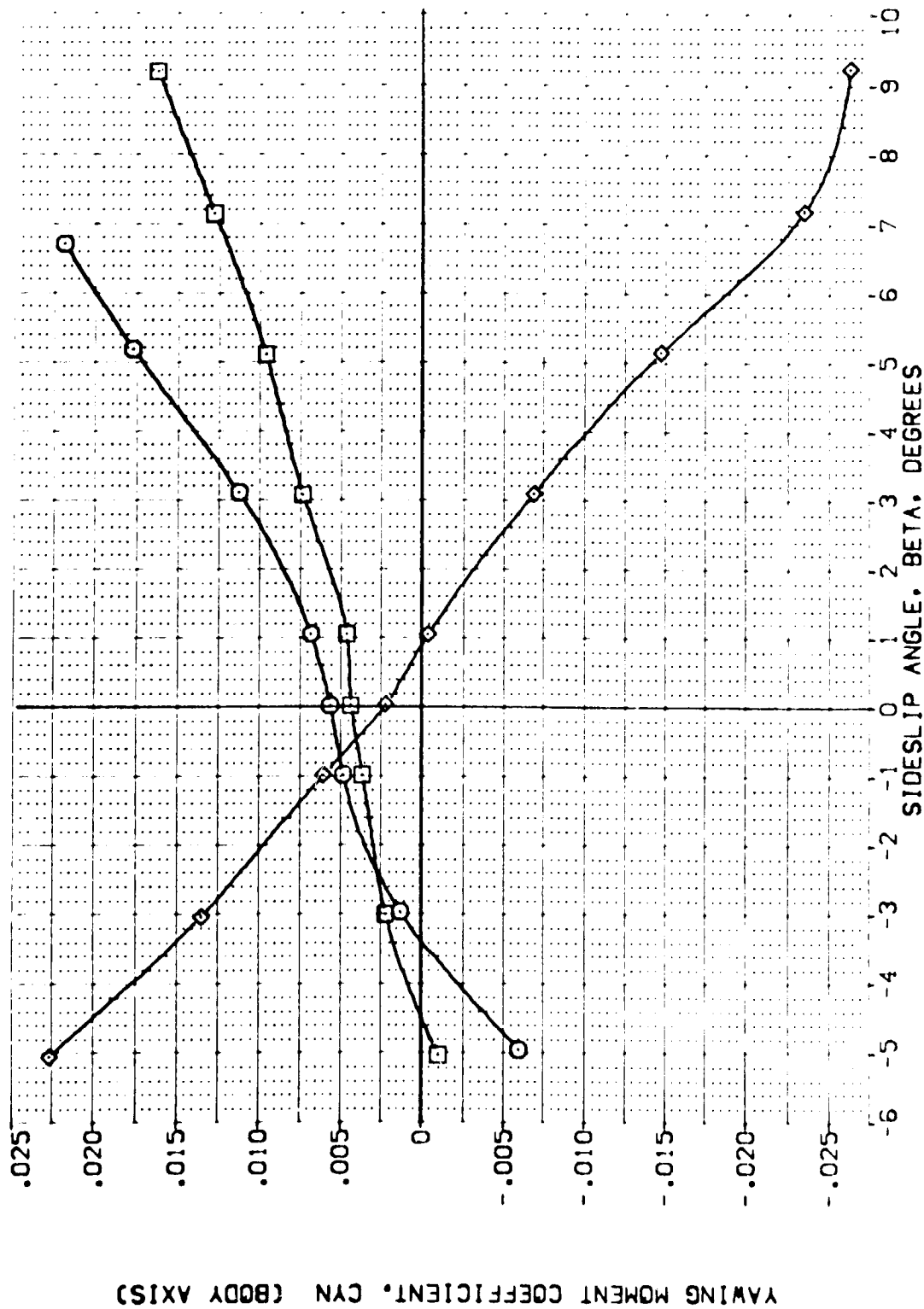


FIG. 21 RUDDER EFFECTS, SPEEDBRAKE 85 DEGREES

(C)MAC = .91



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPEEDBRK	REFERENCE INFORMATION
[AEJ046]	ARC 11-747 OA53A B C M F V1	0.000	-10.000	-11.700	85.000	SREF 2.4210 SQ.FT.
[AEJ047]	ARC 11-747 OA53A B C M F V1	10.000	-10.000	-11.700	85.000	LREF 14.2440 IN.
[AEJ048]	ARC 11-747 OA53A B C M F V1	20.000	-10.000	-11.700	85.000	BREF 28.1004 IN.
						XMRD 32.3010 IN.
						YMRD .0000 IN.
						ZMRD 11.2500 IN.
						SCALE .0300

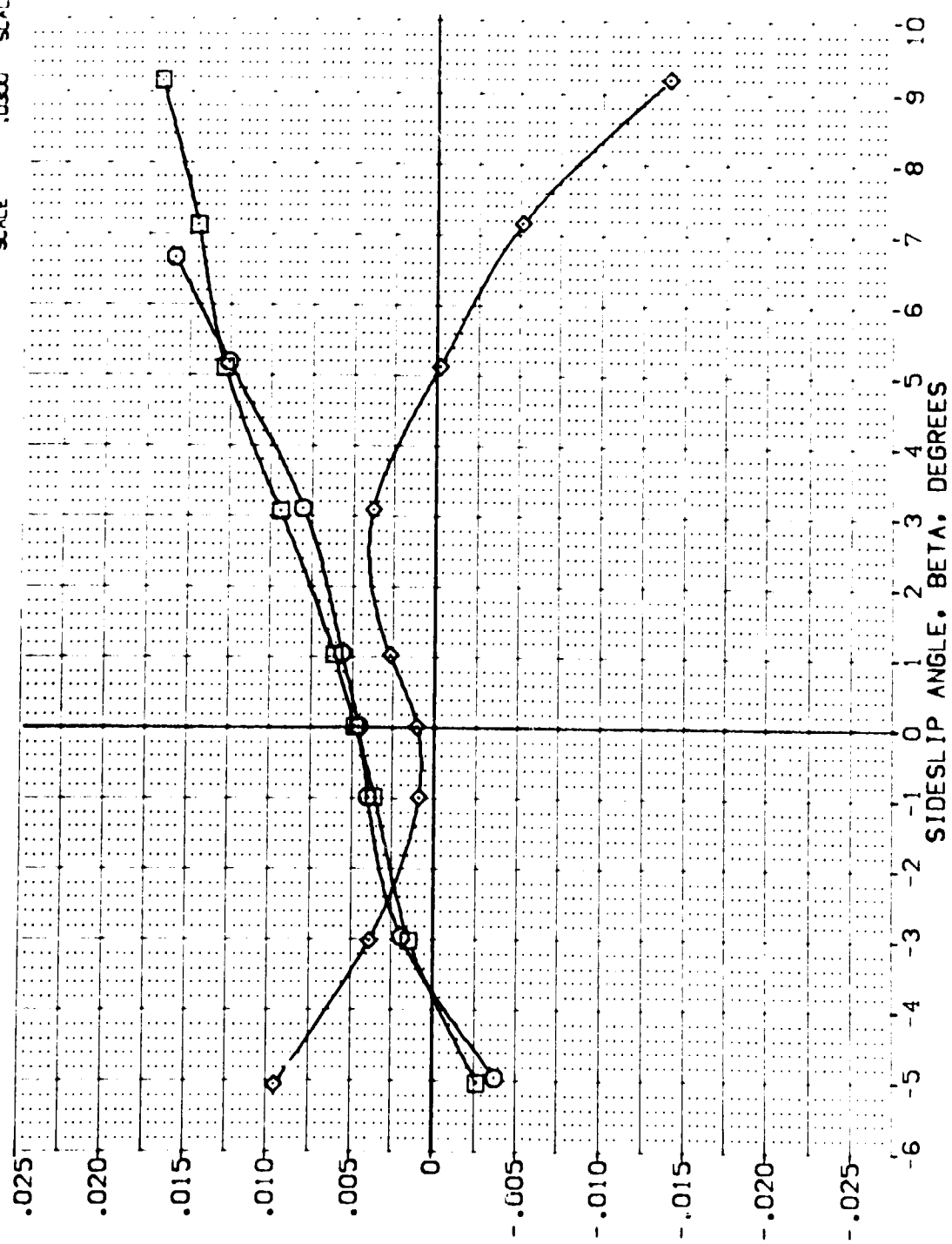


FIG. 21 RUDDER EFFECTS, SPEEDBRAKE 85 DEGREES

(C)MAC = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	80% LAP	SPEEDBRAKE	REFERENCE INFORMATION
(AEJ046)	ARC 11-747 BASSA B C H F V	0.000	-10.000	-11.700	85.000	SREF 2.4210 SQ. FT.
(AEJ047)	ARC 11-747 BASSA B C H F V	10.000	-10.000	-11.700	85.000	LREF 14.2440
(AEJ048)	ARC 11-747 BASSA B C H F V	20.000	-10.000	-11.700	85.000	BREF 28.1004
						YREF 32.3010
						ZREF 0.0000
						YPRP 11.2500
						SCALE 0.0000

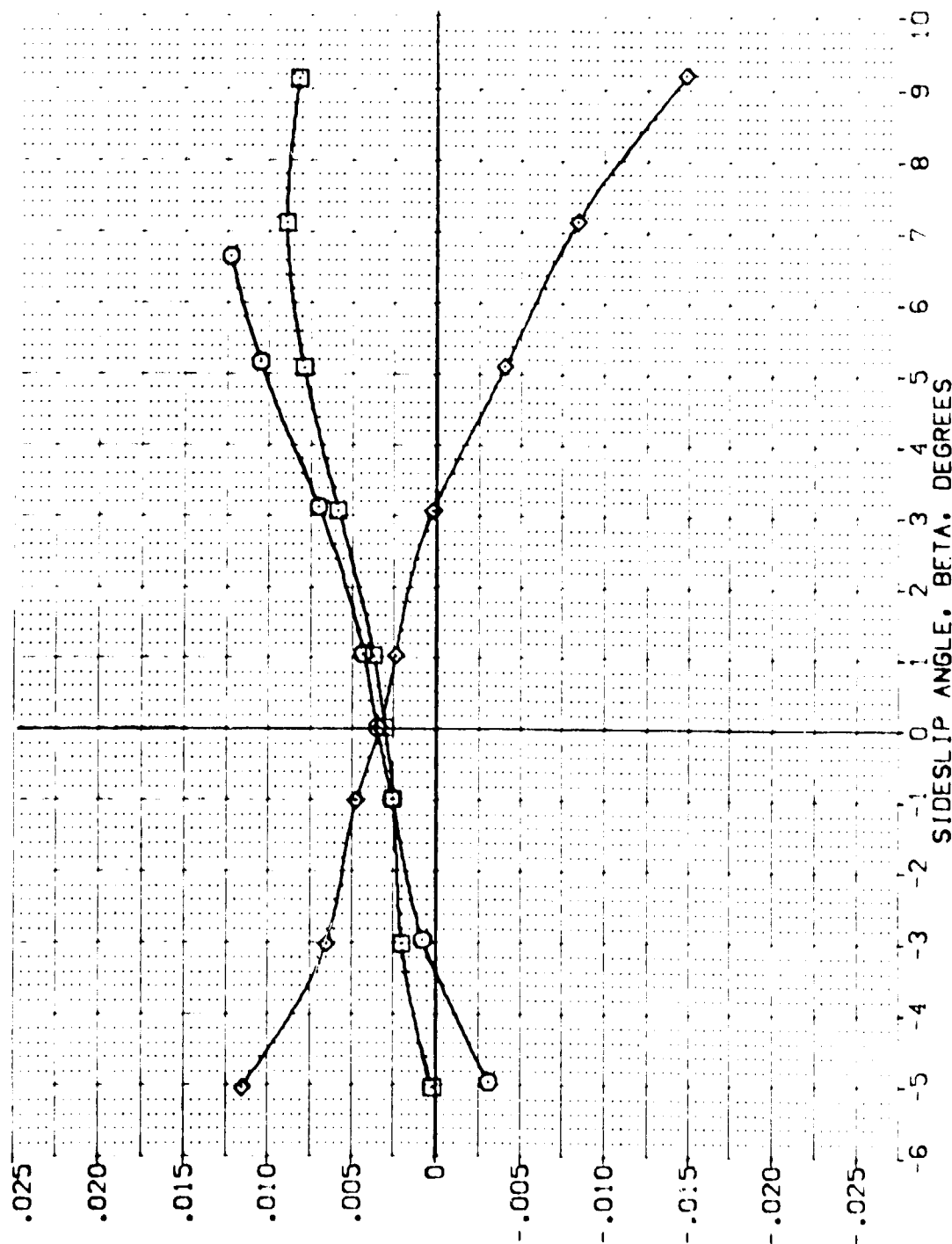


FIG. 21 RUDDER EFFECTS, SPEEDBRAKE 85 DEGREES

MAC = 1.20

DATA SET SYMBOL CONFIGURATION DESCRIPTION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BDLAP	SPEED	REFERENCE INFORMATION
[AEJ046]	ARC 11-747 DA53A B C H F V	0.000	-10.000	-11.700	85.000	SREF 2.4210 SQ.FT.
[AEJ047]	ARC 11-747 DA53A B C H F V	10.000	-10.000	-11.700	85.000	LREF 14.2440 IN.
[AEJ048]	ARC 11-747 DA53A B C H F V	20.000	-10.000	-11.700	85.000	BREF 28.1004 IN.
						XPROP 32.3010 IN.
						YPROP 11.0000 IN.
						ZPROP 11.2500 IN.
						SCALE .0300

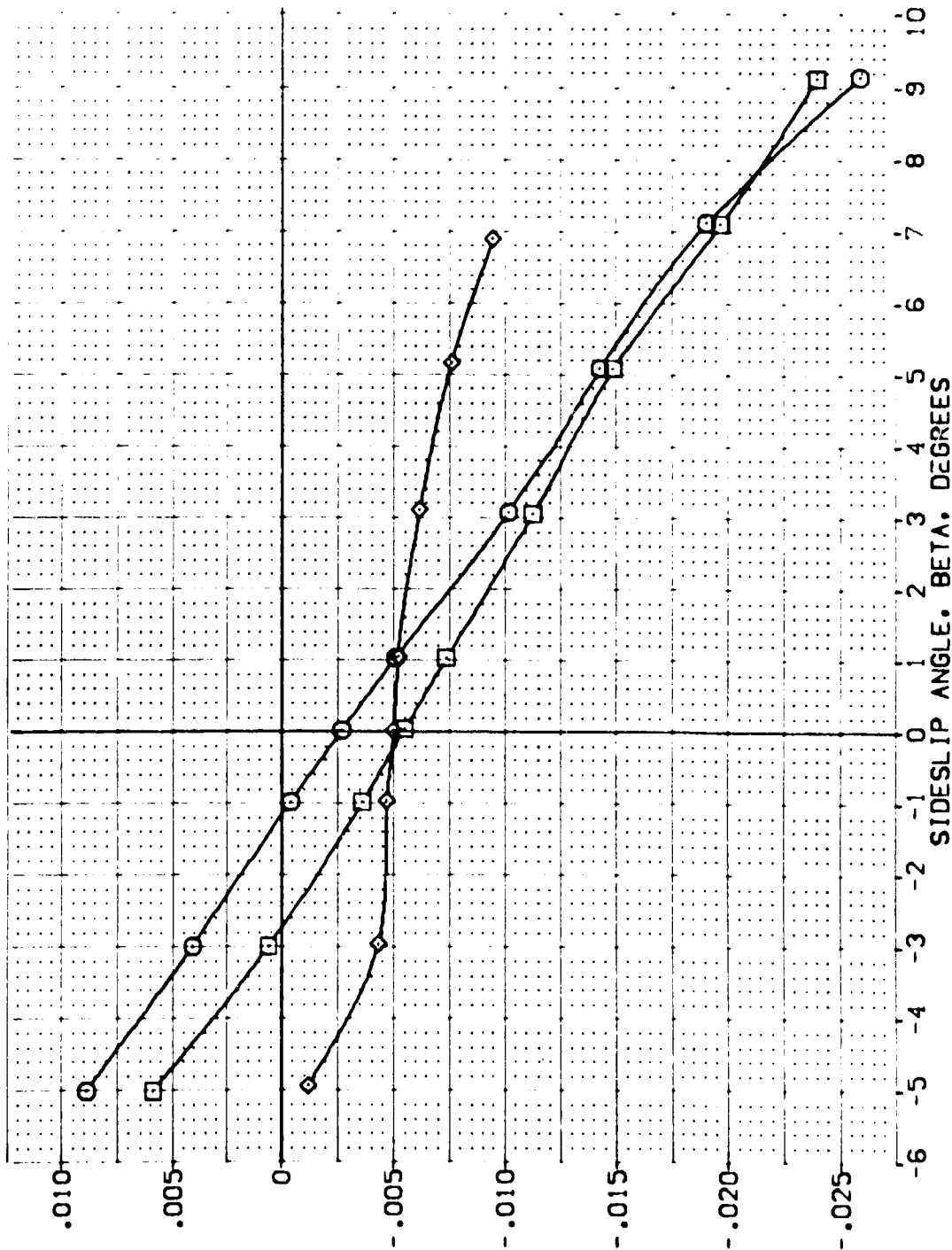


FIG. 21 RUDDER EFFECTS, SPEEDBRAKE 85 DEGREES

(A)MAC = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPEEDBK	REFERENCE INFORMATION
[AEJ046]	ARC 11-747 DA53A B C M F VI V	0.000	-10.000	-11.700	85.000	SREF 2.4210 SQ.FT.
[AEJ047]	ARC 11-747 DA53A B C M F VI V	10.000	-10.000	-11.700	85.000	LREF 14.2440 IN.
[AEJ048]	ARC 11-747 DA53A B C M F VI V	20.000	-10.000	-11.700	85.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

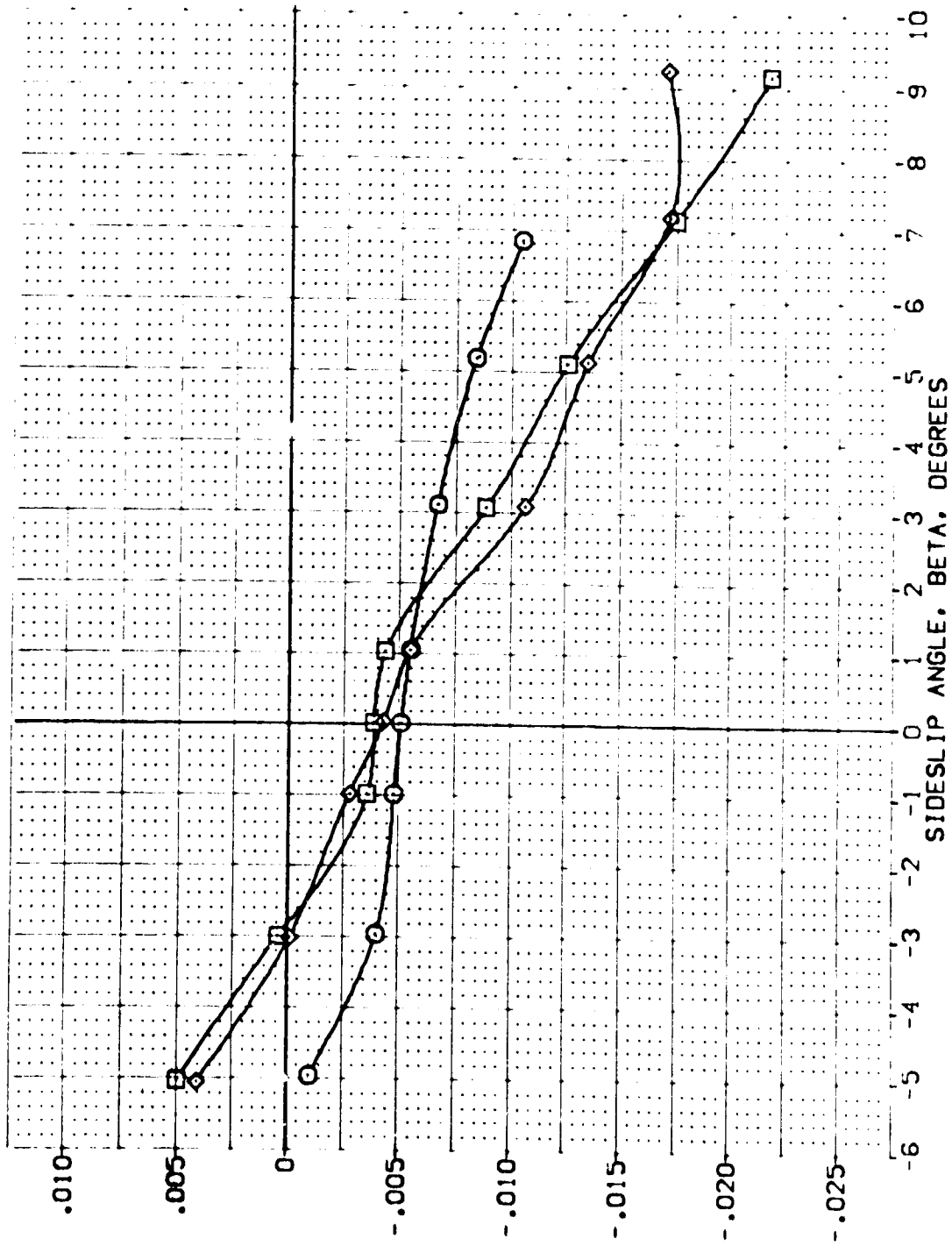


FIG. 21 RUDDER EFFECTS, SPEEDBRAKE 85 DEGREES

(B)MAC = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPOBRK	REFERENCE INFORMATION	
(AEJ046)	ARC 11-747 GA53A B C M F V1 V	0.000	-10.000	-11.700	85.000	SREF	2.4210
(AEJ047)	ARC 11-747 GA53A B C M F V1 V	10.000	-10.000	-11.700	85.000	REF	14.2410
(AEJ048)	ARC 11-747 GA53A B C M F V1 V	20.000	-10.000	-11.700	85.000	REF	28.1004
						XMRP	32.3010
						YMRP	.0000
						ZMRP	11.2500
						SCALE	.0300

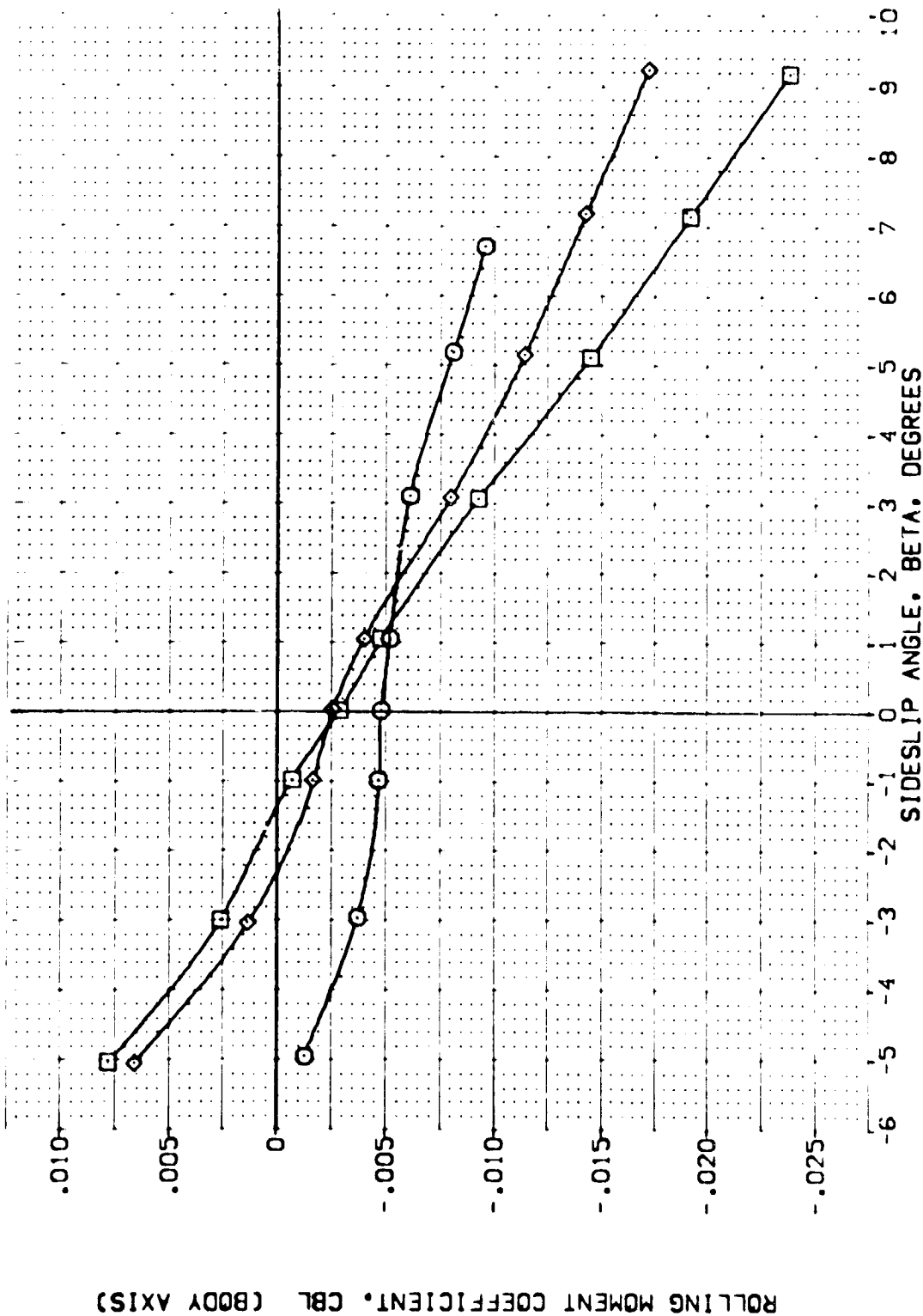


FIG. 21 RUDDER EFFECTS, SPEEDBRAKE 85 DEGREES

(C)MAC = .91

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPEED	REFERENCE INFORMATION
(AEJ046)	ARC 11-747 DA53A B C H F V1 V	0.000	-10.000	-11.700	85.000	SREF 2.4210 SQ.FT.
(AEJ047)	ARC 11-747 DA53A B C H F V1 V	10.000	-10.000	-11.700	85.000	LREF 14.2440 IN.
(AEJ048)	ARC 11-747 DA53A B C H F V1 V	20.000	-10.000	-11.700	85.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

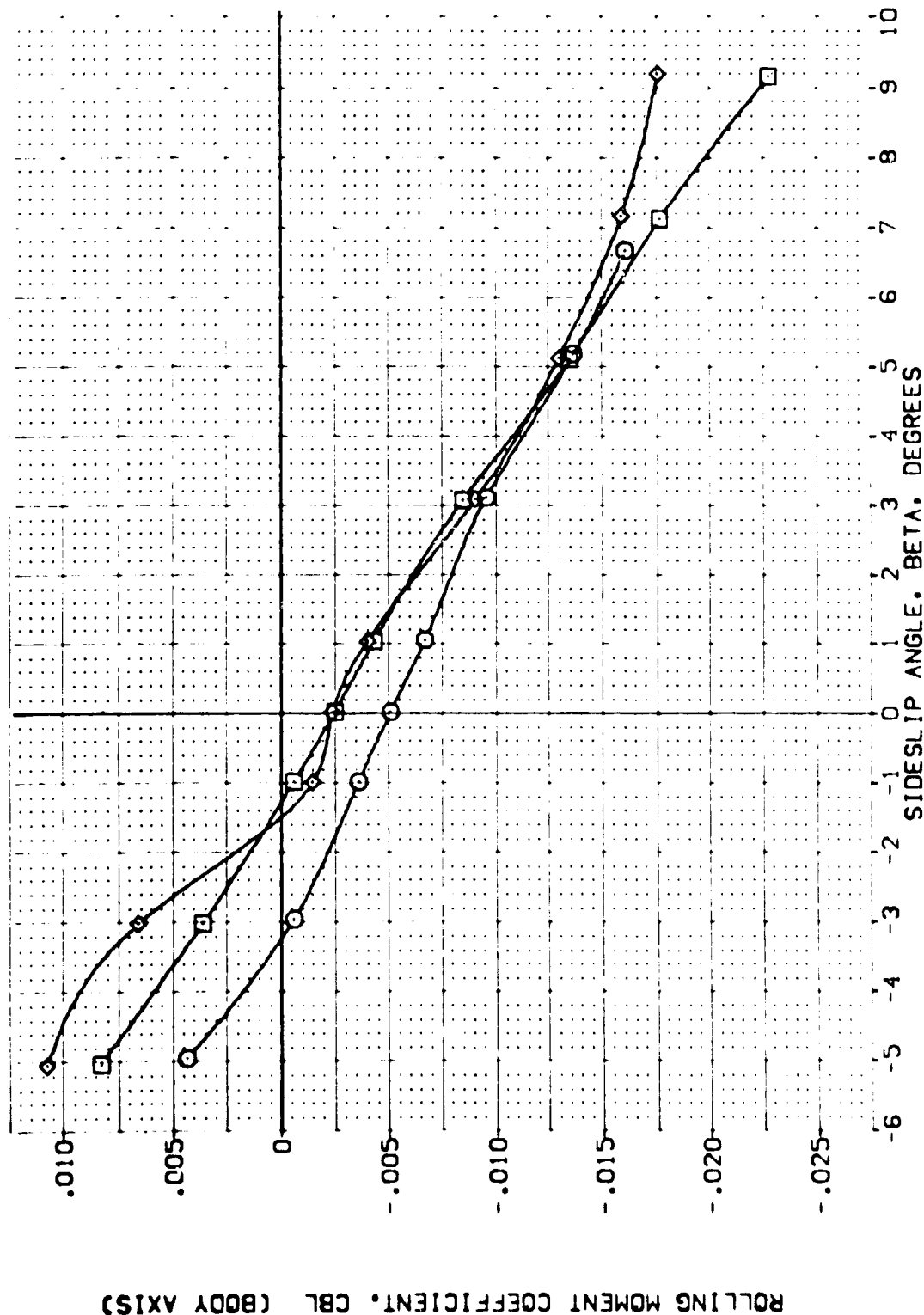


FIG. 21 RUDDER EFFECTS, SPEEDBRAKE 85 DEGREES

(C)MAC = 1.05

DATA SET SYMBOL CONFIGURATION DESCRIPTION

[AEJ045] Q ARC 11-747 BAS3A B C M F V V

[AEJ047] X ARC 11-747 BAS3A B C M F V V

[AEJ048] X ARC 11-747 BAS3A B C M F V V

ALPHA RUDDER BDF LAP SPEEDBRAK

0.000 -10.000 -11.700 85.000

10.000 -10.000 -11.700 85.000

20.000 -10.000 -11.700 85.000

REFERENCE INFORMATION

SREF 2.4210 SQ.FT.

LREF 14.2440 IN.

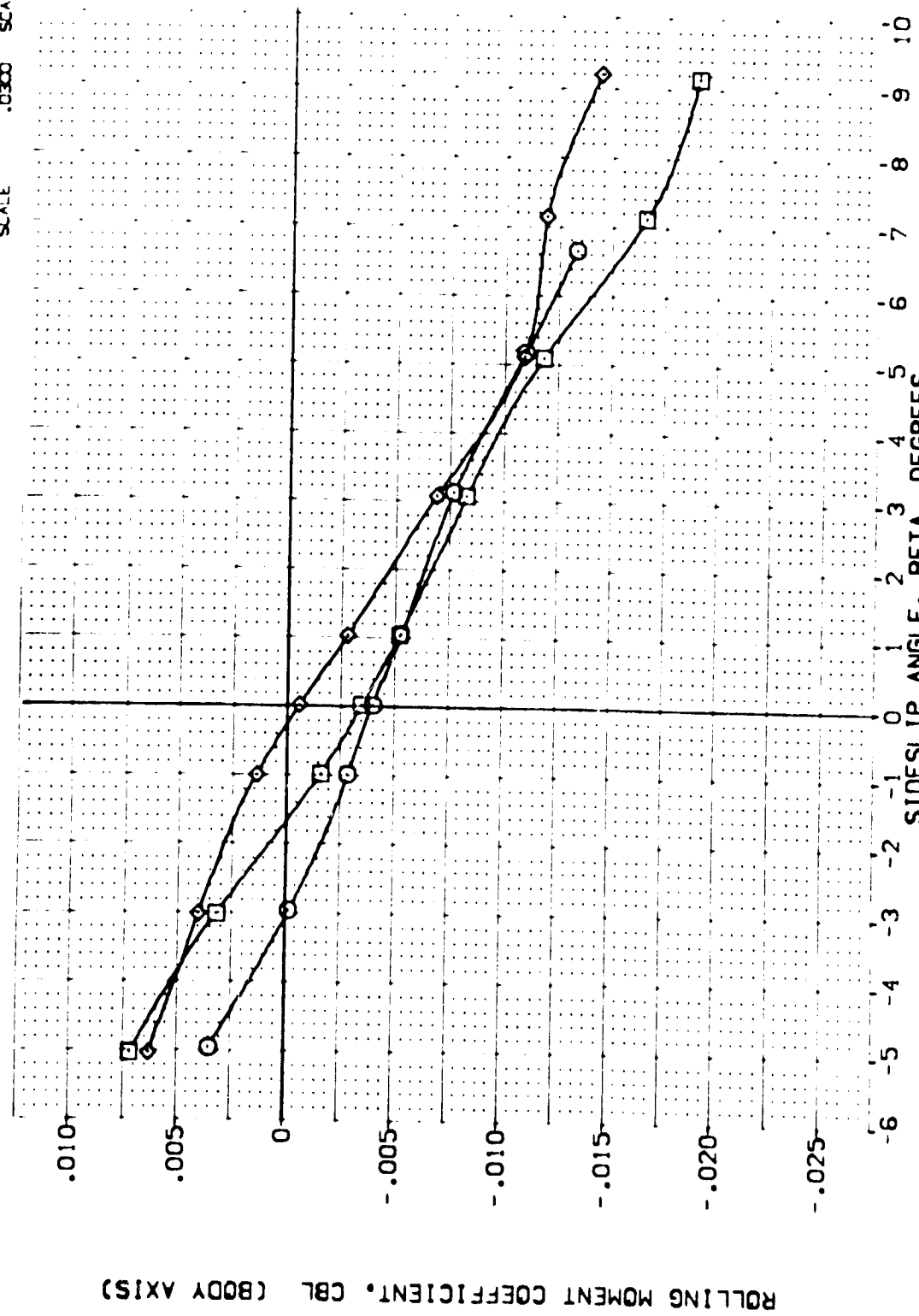
BREF 28.1004 IN.

XMRP 32.3010 IN.

YMRP 0.0000 IN.

ZMRP 11.2500 IN.

SCALE 0.0300 SCALE



ROLLING MOMENT COEFFICIENT, CBL (BODY AXIS)

FIG. 21 RUDDER EFFECTS, SPEEDBRAKE 85 DEGREES

(E)MAC = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	DR	BD FLAP	SPEEDBRAK	REFERENCE INFORMATION
[VEJ029]	ARC 11-747 CAS3A B C H F VI V	0.000	-10.000	-11.700	25.000	SREF 2.4210 50.000
[VEJ030]	ARC 11-747 CAS3A B C H F VI V	10.000	-10.000	-11.700	25.000	LREF 14.2440 22.000
[VEJ031]	ARC 11-747 CAS3A B C H F VI V	20.000	-10.000	-11.700	25.000	BREF 28.1004 22.000
[VEJ032]	ARC 11-747 CAS3A B C H F VI V	10.000	-25.000	-11.700	25.000	XMRP 32.3010 22.000
[VEJ033]	ARC 11-747 CAS3A B C H F VI V	20.000	-25.000	-11.700	25.000	YMRP 11.2500 22.000
[VEJ034]	ARC 11-747 CAS3A B C H F VI V	20.000	-25.000	-11.700	25.000	ZMRP 11.2500 22.000

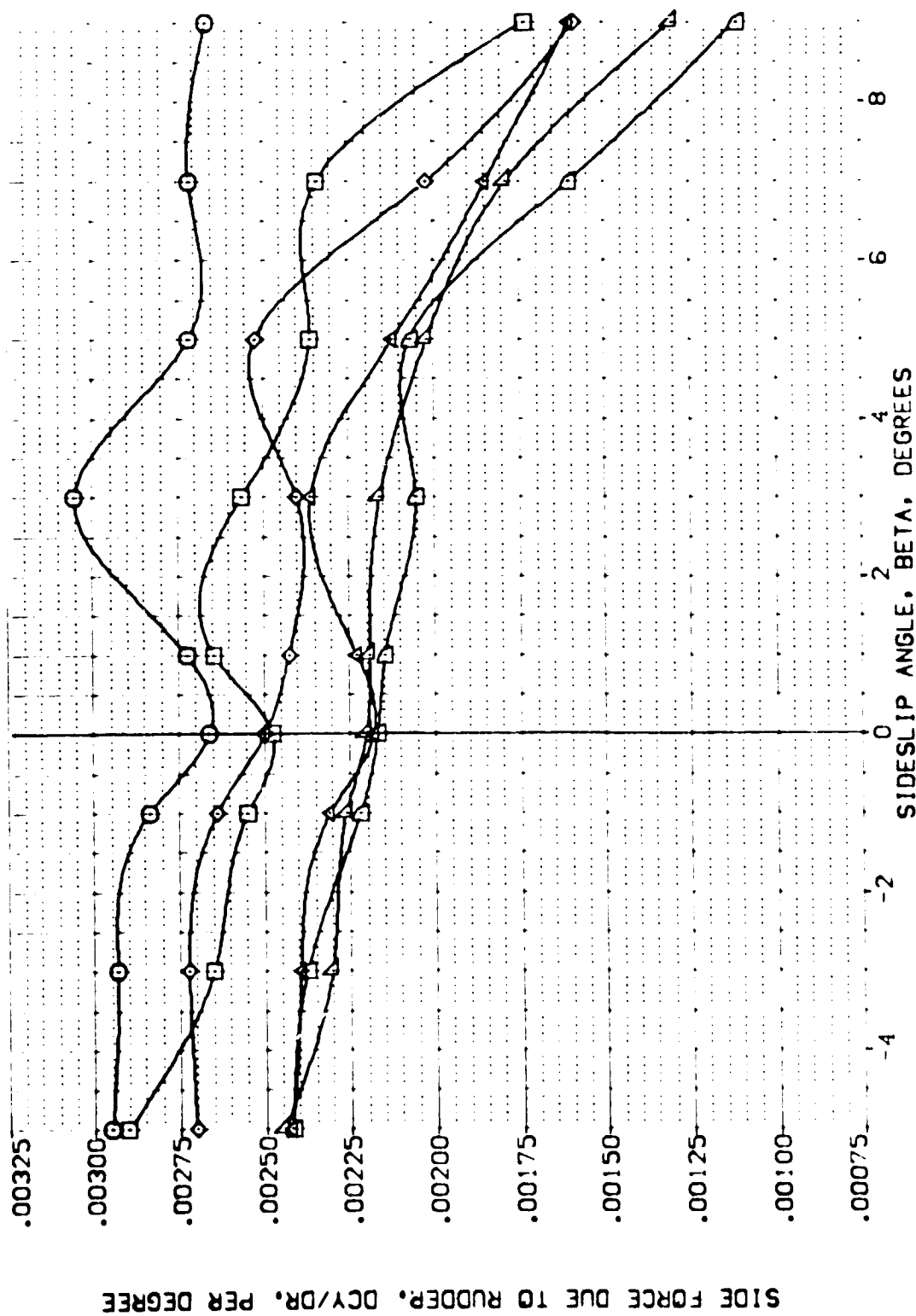


FIG. 22 RUDDER DERIVATIVES, SPEEDBRAKE 25 DEGREES

(A) MAC = .60



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	DR	BOFLAP	SPOBRK	REFERENCE INFORMATION
(VEJ029)	ARC 11-747 D453A B C H F VI V	10.000	-10.000	-11.700	25.000	SREF 2.4210 SQ. FT.
(VEJ030)	ARC 11-747 D453A B C H F VI V	10.000	-10.000	-11.700	25.000	LREF 14.244C
(VEJ031)	ARC 11-747 D453A B C H F VI V	10.000	-10.000	-11.700	25.000	BREF 28.1004
(VEJ032)	ARC 11-747 D453A B C H F VI V	10.000	-10.000	-11.700	25.000	XMRP 32.3010
(VEJ033)	ARC 11-747 D453A B C H F VI V	10.000	-10.000	-11.700	25.000	YMRP 11.2500
(VEJ034)	ARC 11-747 D453A B C H F VI V	10.000	-10.000	-11.700	25.000	SCALE .0300

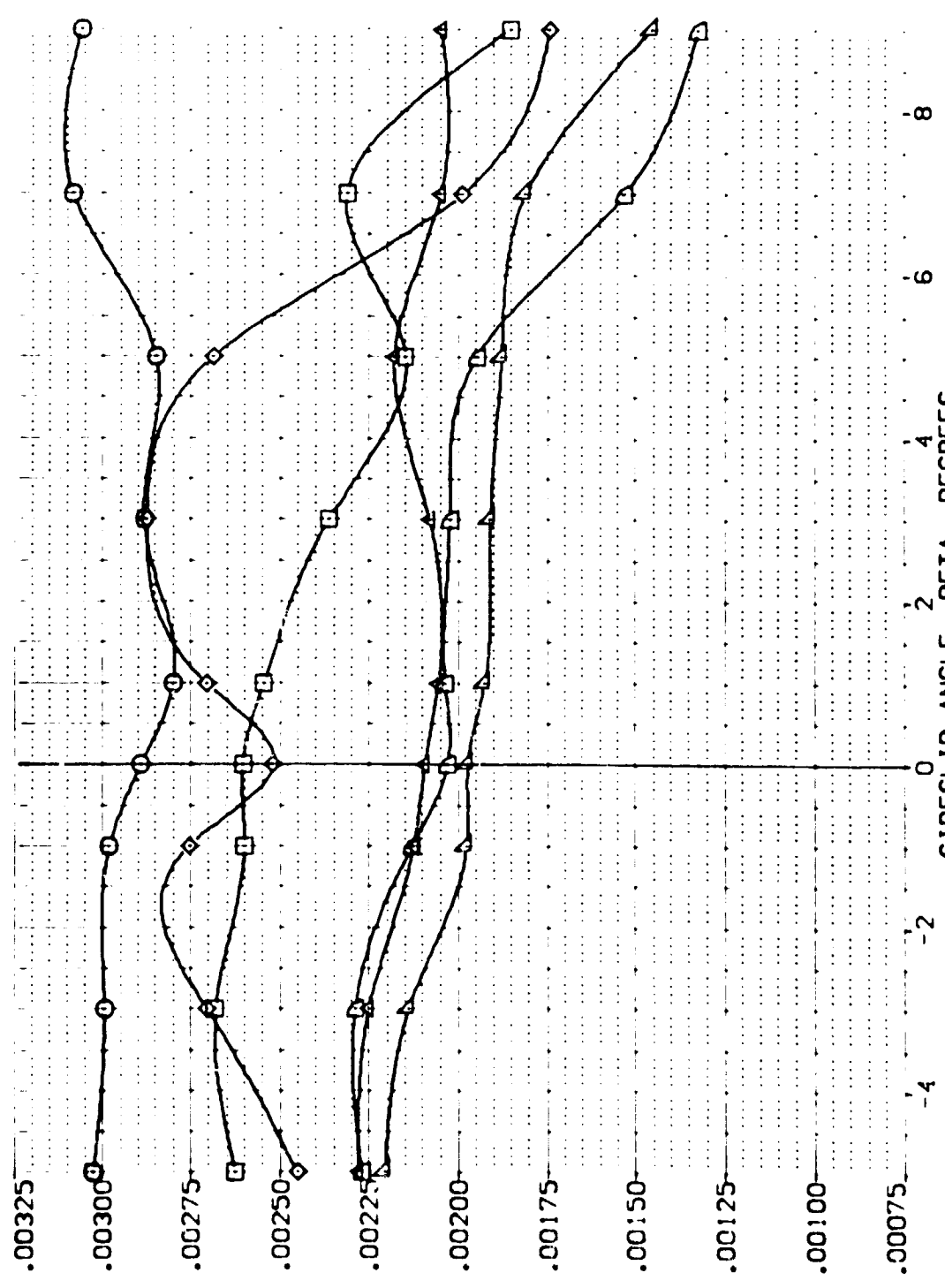
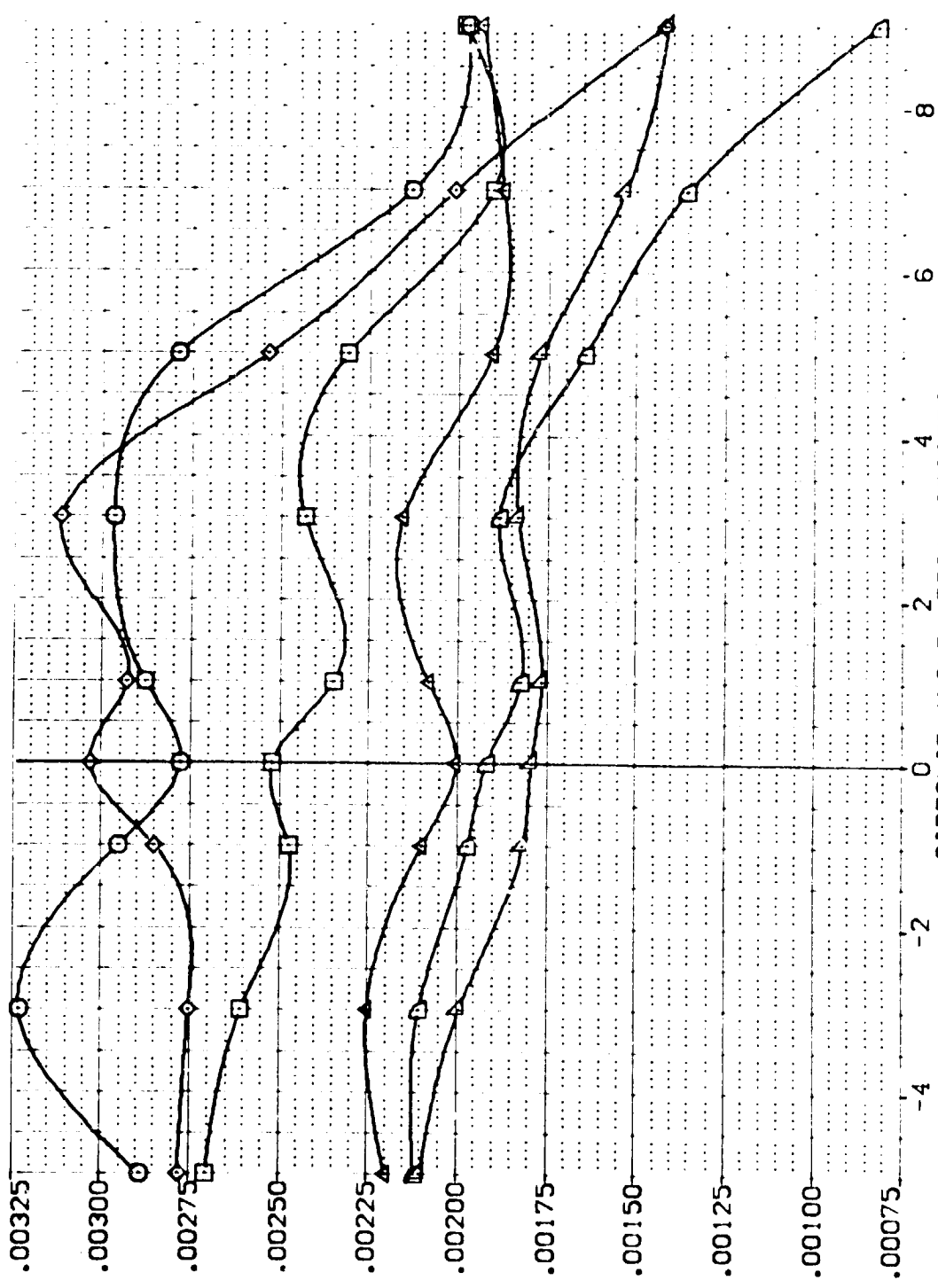


FIG. 22 RUDDER DERIVATIVES, SPEEDBRAKE 25 DEGREES

(B)MAC = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	DR	BDF LAP	SPEED BRK	REFERENCE INFORMATION
(VE1029)	ARC 11-747 DA53A B C H F V	0.000	-10.000	-11.700	25.000	SREF 2.4210 SQ. FT.
(VE1030)	ARC 11-747 DA53A B C H F V	10.000	-10.000	-11.700	25.000	LREF 14.2440 IN.
(VE1031)	ARC 11-747 DA53A B C H F V	20.000	-10.000	-11.700	25.000	BREF 28.1004 IN.
(VE1032)	ARC 11-747 DA53A B C H F V	10.000	-25.000	-11.700	25.000	XMRP 32.3010 IN.
(VE1033)	ARC 11-747 DA53A B C H F V	20.000	-25.000	-11.700	25.000	YMRP 11.2500 IN.
(VE1034)	ARC 11-747 DA53A B C H F V	10.000	-25.000	-11.700	25.000	ZMRP 11.2500 IN.
						SCALE .0300



SIDE FORCE DUE TO RUDDER, DCY/DR. PER DEGREE

SIDESLIP ANGLE, BETA, DEGREES

FIG. 22 RUDDER DERIVATIVES, SPEEDBRAKE 25 DEGREES

(C)<sup>MAC</sup> = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	DR	BD FLAP	SPEED	REFERENCE INFORMATION
[VEJ029]	ARC 11-747 DA53A B C H F VI V	0.000	-10.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[VEJ030]	ARC 11-747 DA53A B C H F VI V	10.000	-10.000	-11.700	25.000	LREF 14.2440 IN.
[VEJ031]	ARC 11-747 DA53A B C H F VI V	20.000	-10.000	-11.700	25.000	BREF 28.1004 IN.
[VEJ032]	ARC 11-747 DA53A B C H F VI V	10.000	-25.000	-11.700	25.000	KMRP 32.3010 IN.
[VEJ033]	ARC 11-747 DA53A B C H F VI V	10.000	-25.000	-11.700	25.000	ZMRP 11.2500 IN.
[VEJ034]	ARC 11-747 DA53A B C H F VI V	20.000	-25.000	-11.700	25.000	SCALE 0.0300

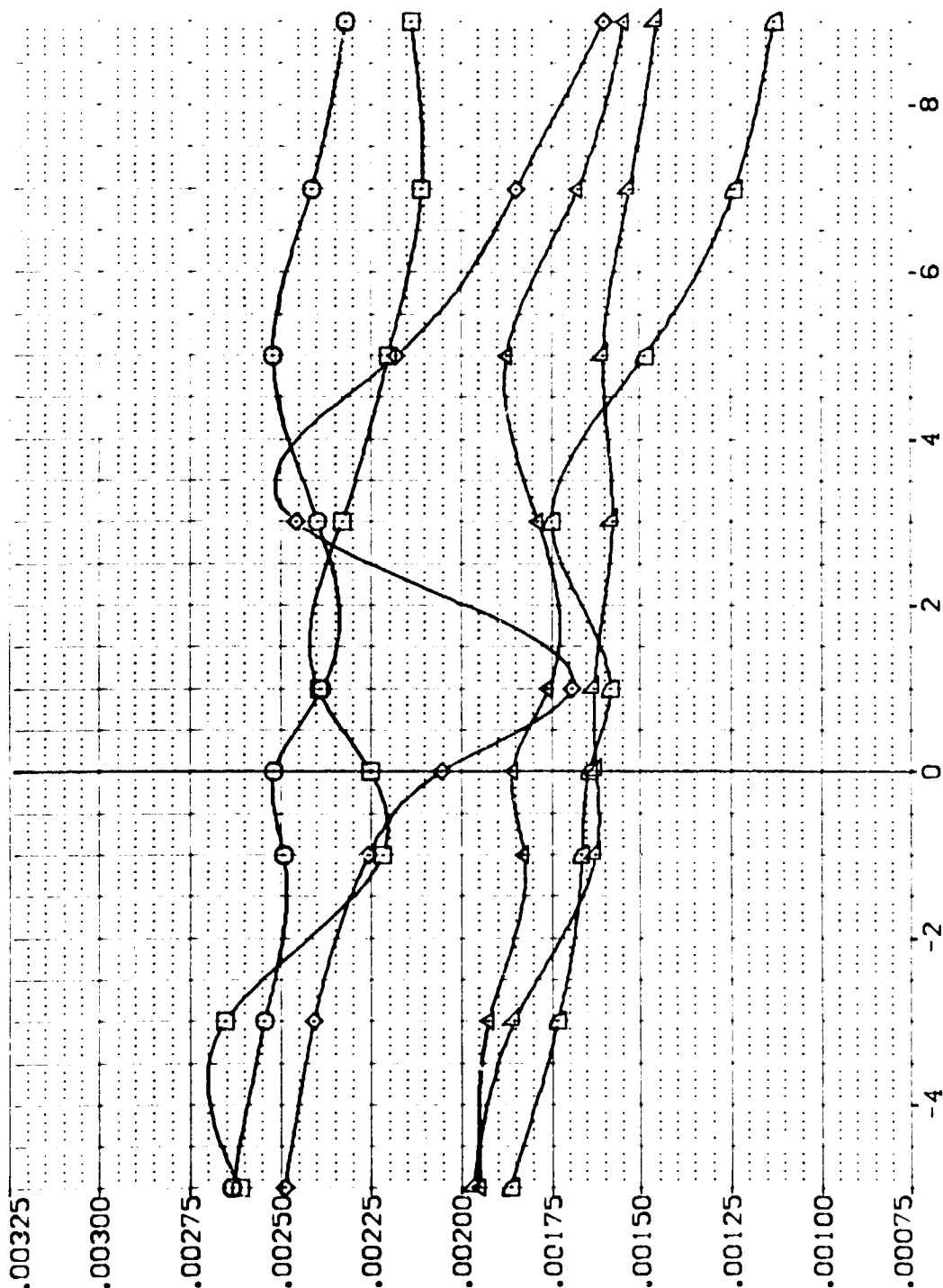


FIG. 22 RUDDER DERIVATIVES, SPEEDBRAKE 25 DEGREES

(C)MAC = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	DR	BD LAP	SPEED	REFERENCE INFORMATION
[VEJ029]	ARC 11-747 BA33A B CUCU F V	0.000	-10.000	11.700	25.000	SREF 2.4210 SQ.FT.
[VEJ030]	ARC 11-747 BA33A B CUCU F V	10.000	-10.000	11.700	25.000	LBREF 14.2440
[VEJ031]	ARC 11-747 BA33A B CUCU F V	20.000	-10.000	11.700	25.000	BRF 28.1004
[VEJ032]	ARC 11-747 BA33A B CUCU F V	10.000	-25.000	11.700	25.000	AMOP 32.3010
[VEJ033]	ARC 11-747 BA33A B CUCU F V	20.000	-25.000	11.700	25.000	VMOP 11.2500
[VEJ034]	ARC 11-747 BA33A B CUCU F V	20.000	-25.000	11.700	25.000	SCALE .0300

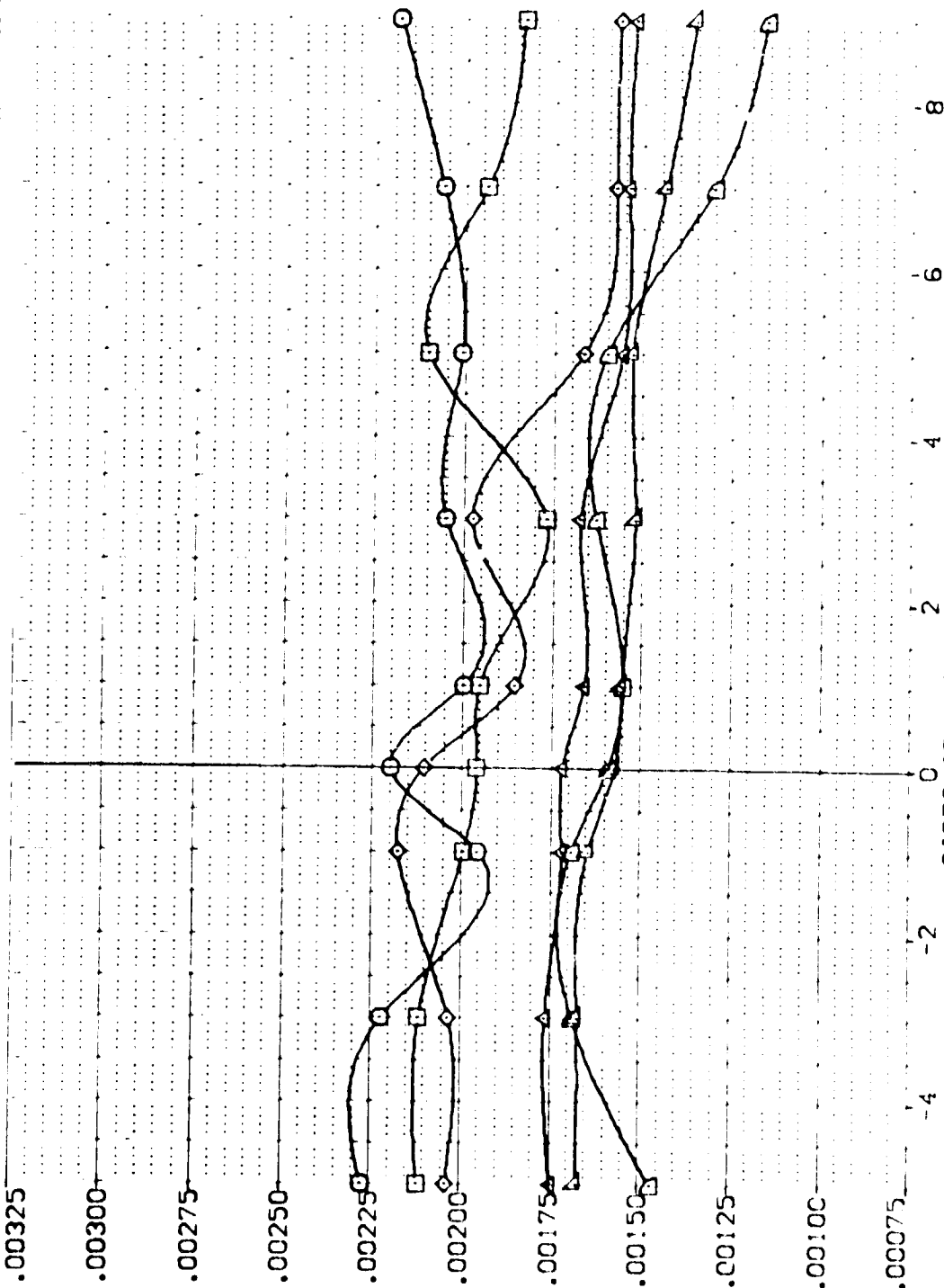


FIG. 22 RUDDER DERIVATIVES, SPEEDBRAKE 25 DEGREES

(EOMAC) = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	DR	BOFLAP	SPEED	REFERENCE INFORMATION
[VEJ029]	ARC 11-747 DASSA B C C H F V	0.000	-10.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[VEJ030]	ARC 11-747 DASSA B C C H F V	10.000	-10.000	-11.700	25.000	REF 14.2440
[VEJ031]	ARC 11-747 DASSA B C C H F V	20.000	-10.000	-11.700	25.000	BREF 28.1004
[VEJ032]	ARC 11-747 DASSA B C C H F V	10.000	-25.000	-11.700	25.000	XMRP 32.3010
[VEJ033]	ARC 11-747 DASSA B C C H F V	10.000	-25.000	-11.700	25.000	YMRP .0000
[VEJ034]	ARC 11-747 DASSA B C C H F V	20.000	-25.000	-11.700	25.000	ZMRP 11.2500
						SCALE .0300 SCALE

YAWING MOMENT DUE TO RUDDER, DCYNDR, PER DEGREE, (BODY AXIS)

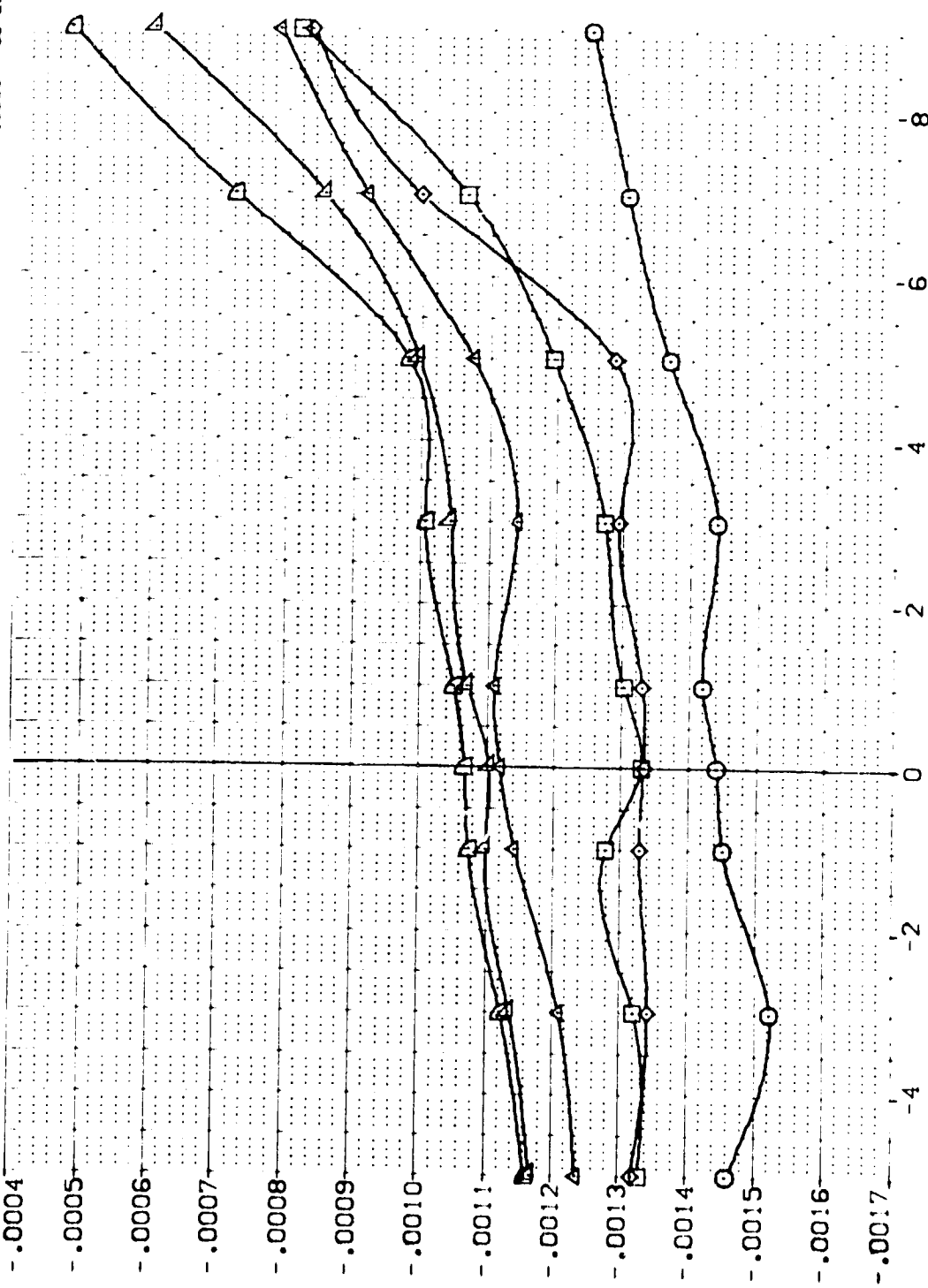


FIG. 22 RUDDER DERIVATIVES, SPEEDBRAKE 25 DEGREES

(A)MAC = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NO.	RV/L	ALPHA	DR	BOLAP	SPDBRK	REFERENCE INFORMATION
(VEJ029)	ARC   -747 DA53A B C M F VI	V	RV/L	.000	-10.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(VEJ030)	ARC   -747 DA53A B C M F VI	V	RV/L	10.000	-10.000	-11.700	25.000	LREF 14.2440 IN.
(VEJ031)	ARC   -747 DA53A B C M F VI	V	RV/L	20.000	-10.000	-11.700	25.000	BREF 28.1004 IN.
(VEJ032)	ARC   -747 DA53A B C M F VI	V	RV/L	10.000	-25.000	-11.700	25.000	XREF 32.3010 IN.
(VEJ033)	ARC   -747 DA53A B C M F VI	V	RV/L	20.000	-25.000	-11.700	25.000	YREF .0000 IN.
(VEJ034)	ARC   -747 DA53A B C M F VI	V	RV/L	20.000	-25.000	-11.700	25.000	ZREF 11.2500 IN.
								SCALE .0300

YAWING MOMENT DUE TO RUDDER, DCYNDR, PER DEGREE, (BODY AXIS)

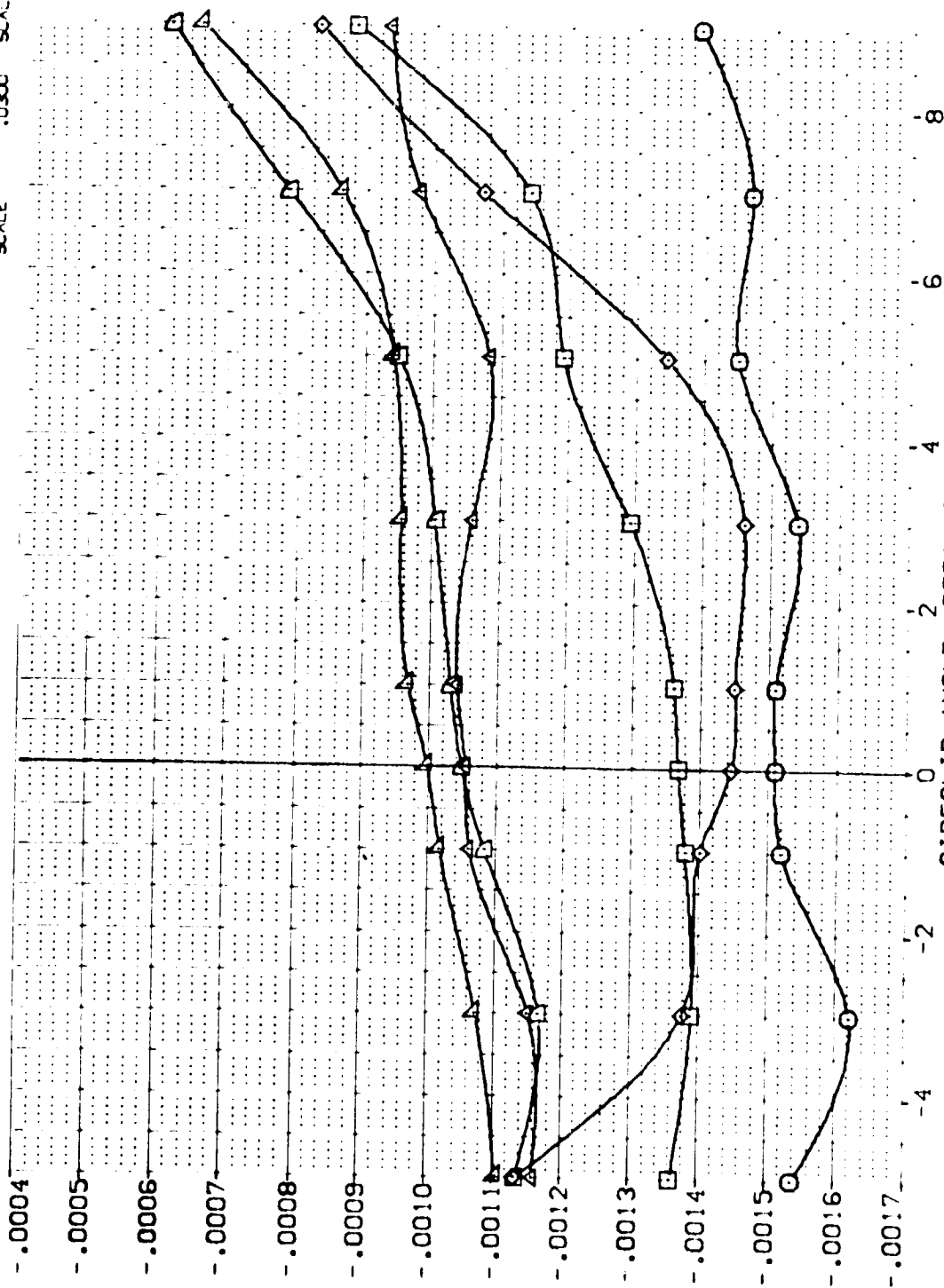


FIG. 22 RUDDER DERIVATIVES, SPEEDBRAKE 25 DEGREES

(B)MAC = .80

DATA SET SYMBOL CONFIGURATION DESCRIPTION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	DR	BOFLAP	SPEEDBK	REFERENCE INFORMATION
[VEJ029]	ARC -747 CAS3A B C H F V	0.000	-10.000	-1.700	25.000	SREF 2.4210 SQ.FT.
[VEJ030]	ARC -747 CAS3A B C H F V	10.000	-10.000	-1.700	25.000	LREF 14.2440
[VEJ031]	ARC -747 CAS3A B C H F V	20.000	-10.000	-1.700	25.000	BREF 28.1004
[VEJ032]	ARC -747 CAS3A B C H F V	10.000	-25.000	-1.700	25.000	YREF 32.3010
[VEJ033]	ARC -747 CAS3A B C H F V	10.000	-25.000	-1.700	25.000	ZREF 11.2500
[VEJ034]	ARC -747 CAS3A B C H F V	20.000	-25.000	-1.700	25.000	SCALE .0300

YAWING MOMENT DUE TO RUDDER, DCYNDR. PER DEGREE, (BODY AXIS)

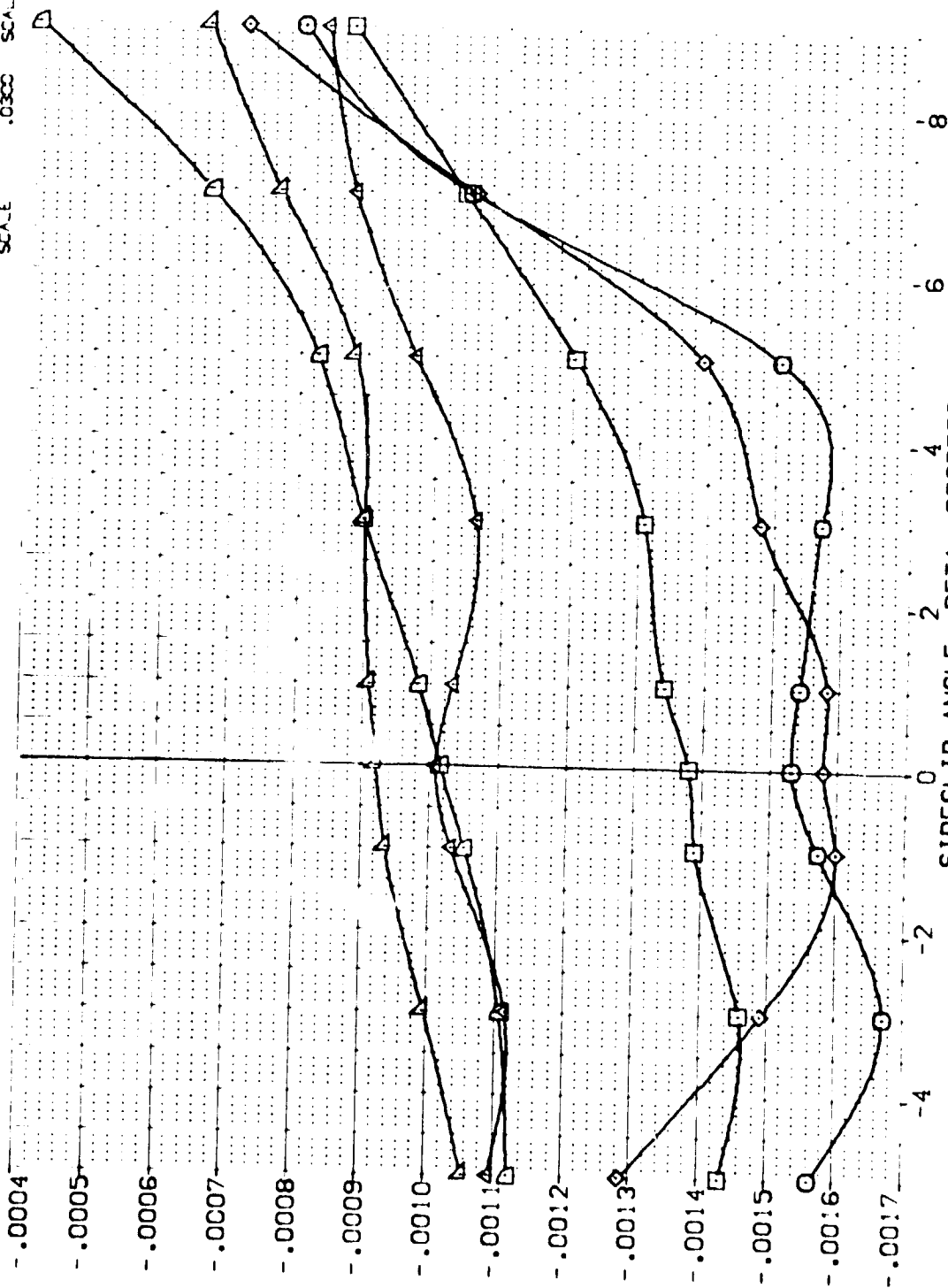


FIG. 22 RUDDER DERIVATIVES, SPEEDBRAKE 25 DEGREES

(C)MAC = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	DR	BDF LAP	SPEED	REFERENCE INFORMATION
(VEJ029)	ARC 11-747 D-53A B C H F V	0.000	-10.000	-11.700	25.000	SREF 2.4210 SQ. FT.
(VEJ030)	ARC 11-747 D-53A B C H F V	10.000	-10.000	-11.700	25.000	LRPF 14.2440
(VEJ031)	ARC 11-747 D-53A B C H F V	20.000	-10.000	-11.700	25.000	LRPF 28.1004
(VEJ032)	ARC 11-747 D-53A B C H F V	10.000	-25.000	-11.700	25.000	YREF 32.3010
(VEJ033)	ARC 11-747 D-53A B C H F V	20.000	-25.000	-11.700	25.000	YREF 11.2500
(VEJ034)	ARC 11-747 D-53A B C H F V	20.000	-25.000	-11.700	25.000	SCALE 0.000

YAWING MOMENT DUE TO RUDDER, DCYNDR. PER DEGREE, (BODY AXIS)

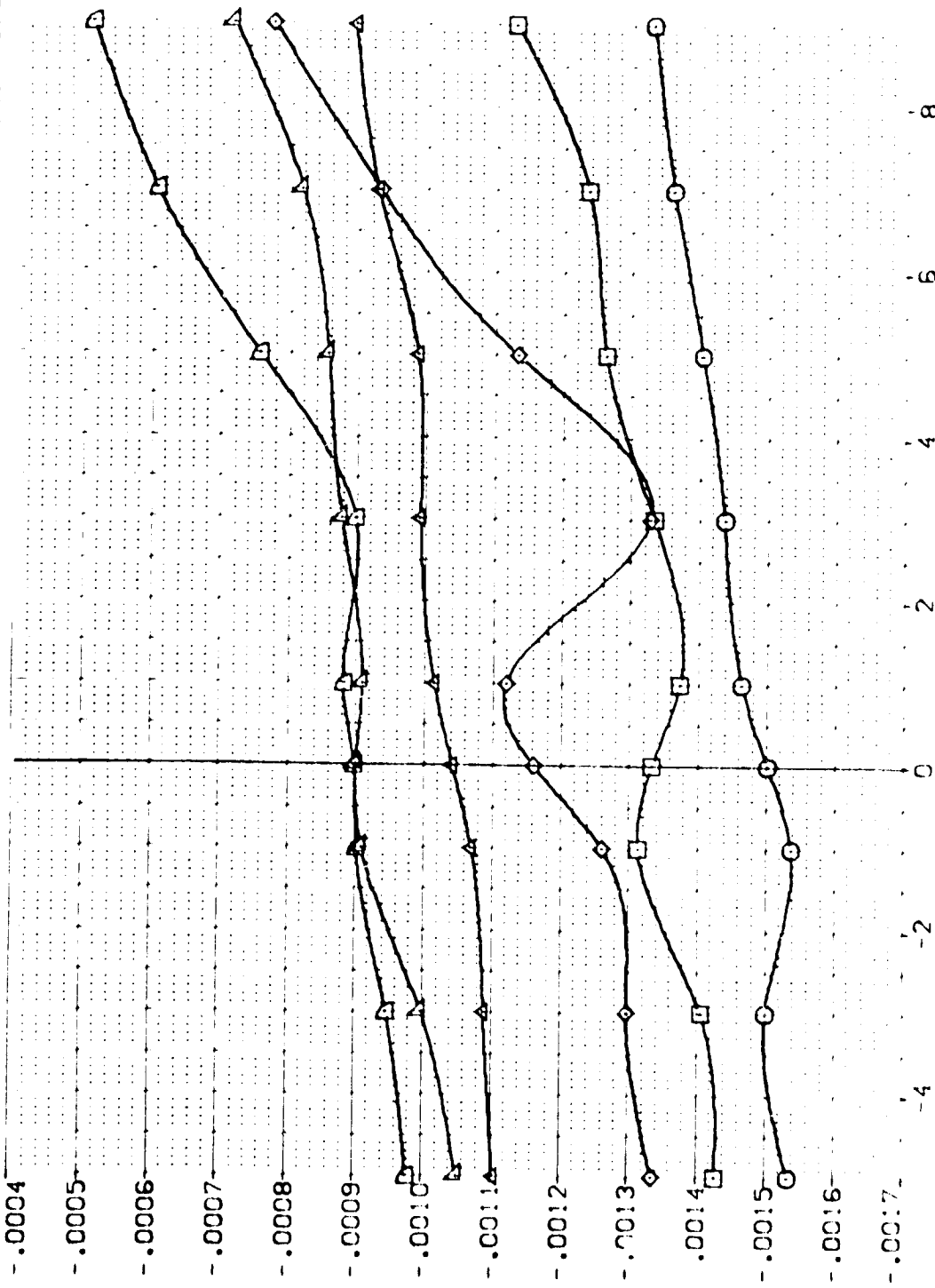


FIG. 22 RUDDER DERIVATIVES, SPEEDBRAKE 25 DEGREES

CONFAC = 1.05



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	DR	BOFLAP	SPEED	REFERENCE INFORMATION
[VEJ029]	ARC -747 D-53A B C H F V	0.000	-10.000	-11.700	25.000	SREF 2.4210 SQ. FT.
[VEJ030]	ARC -747 D-53A B C H F V	10.000	-10.000	-11.700	25.000	BREF 14.2440
[VEJ031]	ARC -747 D-53A B C H F V	20.000	-10.000	-11.700	25.000	BREF 28.1004
[VEJ032]	ARC -747 D-53A B C H F V	10.000	-25.000	-11.700	25.000	YREF 32.3010
[VEJ033]	ARC -747 D-53A B C H F V	20.000	-25.000	-11.700	25.000	ZREF 11.2500
[VEJ034]	ARC -747 D-53A B C H F V	20.000	-25.000	-11.700	25.000	SCALE 10.000

YAWING MOMENT DUE TO RUDDER, DCYNDR, PER DEGREE, (BODY AXIS)

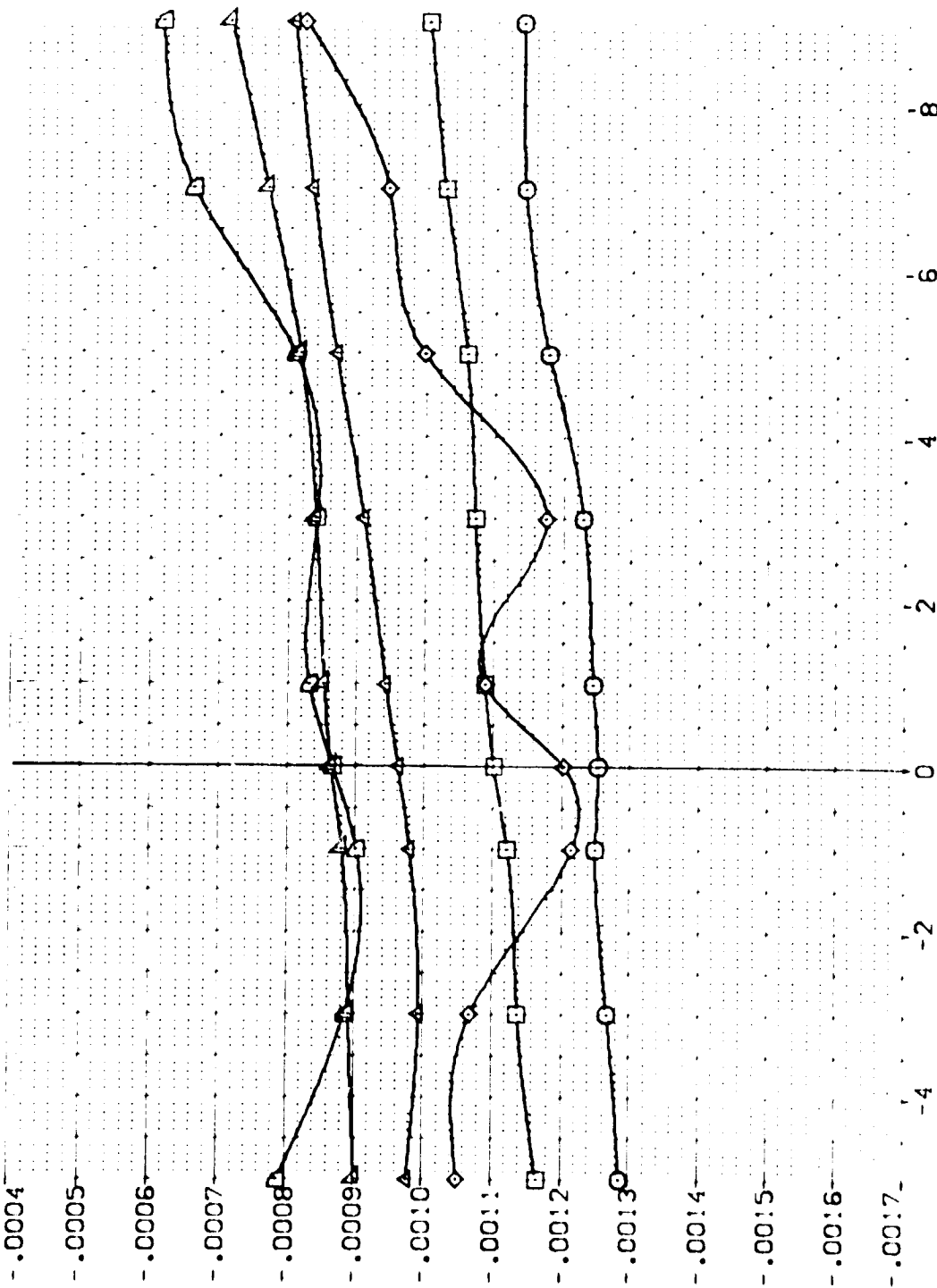


FIG. 22 RUDDER DERIVATIVES, SPEEDBRAKE 25 DEGREES

(CYNDR) = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	DR	BDLAP	SPEED	REFERENCE INFORMATION
[VEJ029]	ARC 11-747 0453A B C M F V	0.000	-10.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[VEJ030]	ARC 11-747 0453A B C M F V	10.000	-10.000	-11.700	25.000	LREF 14.2440
[VEJ031]	ARC 11-747 0453A B C M F V	20.000	-10.000	-11.700	25.000	BREF 28.1004
[VEJ032]	ARC 11-747 0453A B C M F V	10.000	-25.000	-11.700	25.000	AREF 32.3010
[VEJ033]	ARC 11-747 0453A B C M F V	20.000	-25.000	-11.700	25.000	YREF 11.0000
[VEJ034]	ARC 11-747 0453A B C M F V	20.000	-25.000	-11.700	25.000	ZREF 11.0000
						SCALE

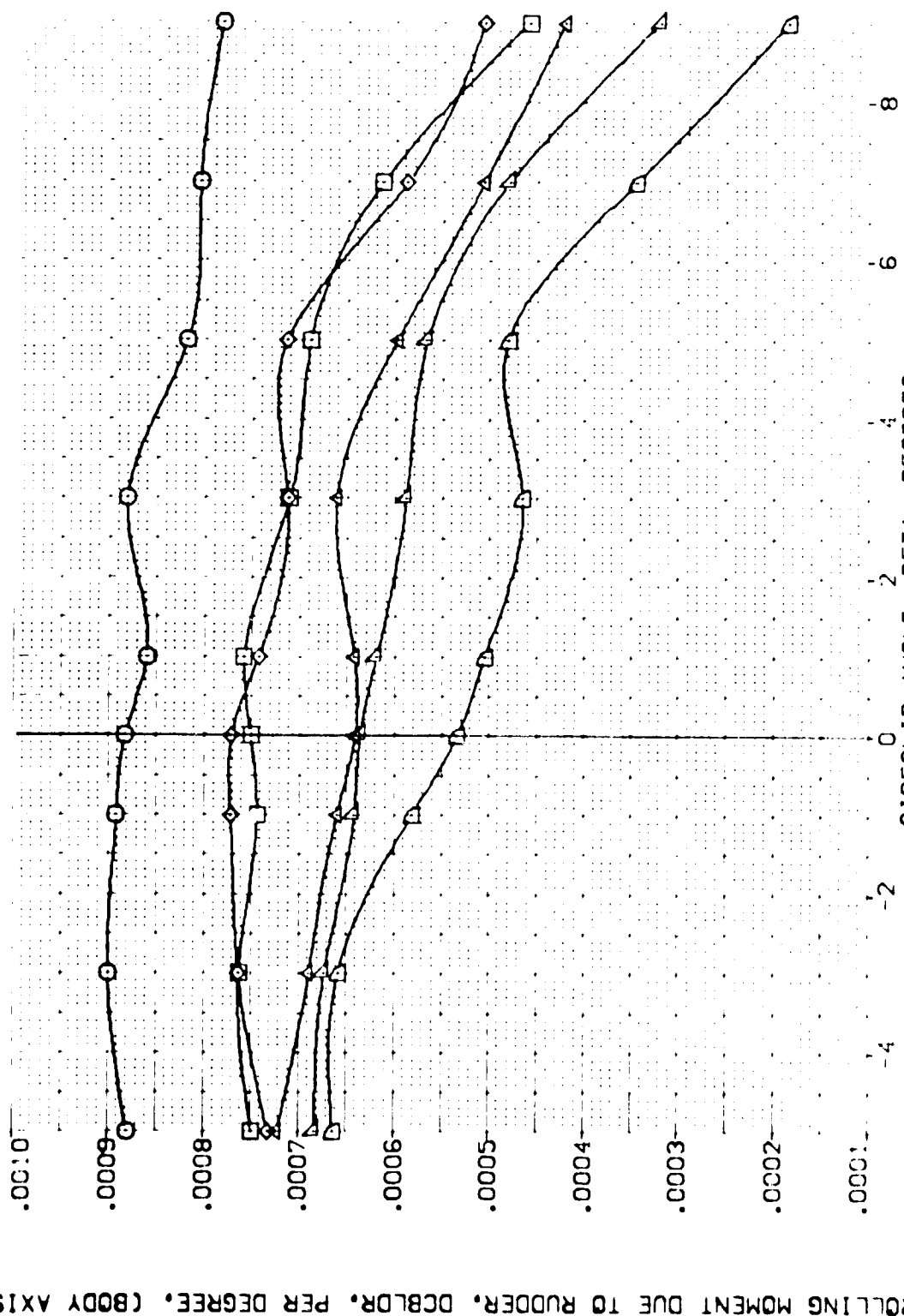


FIG. 22 RUDDER DERIVATIVES, SPEEDBRAKE 25 DEGREES

(A) MAG = .60



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	DR	BDF LAP	SPEEDBRAKE	REFERENCE INFORMATION
[VEJ009]	ARC 11-747 D453A B C C M F V	0.000	-10.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[VEJ030]	ARC 11-747 D453A B C C M F V	10.000	-10.000	-11.700	25.000	LREF 14.2440
[VEJ031]	ARC 11-747 D453A B C C M F V	20.000	-10.000	-11.700	25.000	BREF 28.1004
[VEJ032]	ARC 11-747 D453A B C C M F V	10.000	-25.000	-11.700	25.000	XREF 32.3010
[VEJ033]	ARC 11-747 D453A B C C M F V	20.000	-25.000	-11.700	25.000	YREF 32.3010
[VEJ034]	ARC 11-747 D453A B C C M F V	10.000	-25.000	-11.700	25.000	ZREF 11.2500
						SCALE .0300

ROLLING MOMENT DUE TO RUDDER, DCBLDR, PER DEGREE, (BODY AXIS)

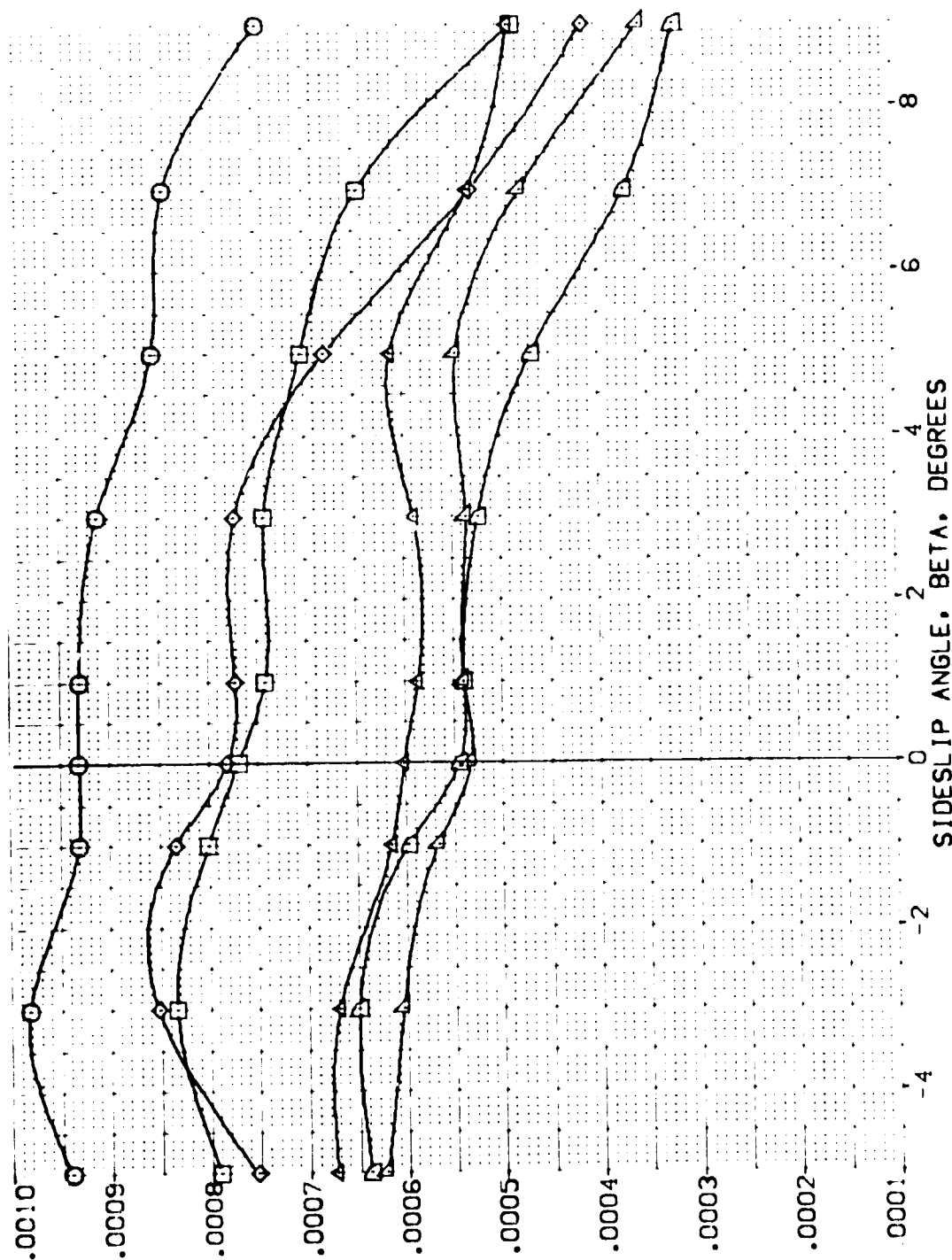


FIG. 22 RUDDER DERIVATIVES, SPEEDBRAKE 25 DEGREES

(B) VAC = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	DR	BDLAP	SPOBRK	REFERENCE INFORMATION
[VEJ029]	ARC 11-747 DAS3A B C M F VI V	0.000	-10.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[VEJ030]	ARC 11-747 DAS3A B C M F VI V	0.000	-10.000	-11.700	25.000	LREF 14.2440
[VEJ031]	ARC 11-747 DAS3A B C M F VI V	20.000	-10.000	-11.700	25.000	BREF 28.1004
[VEJ032]	ARC 11-747 DAS3A B C M F VI V	10.000	-25.000	-11.700	25.000	XMRP 32.3010
[VEJ033]	ARC 11-747 DAS3A B C M F VI V	10.000	-25.000	-11.700	25.000	YMRP 11.2500
[VEJ034]	ARC 11-747 DAS3A B C M F VI V	20.000	-25.000	-11.700	25.000	SCALE 0.0300

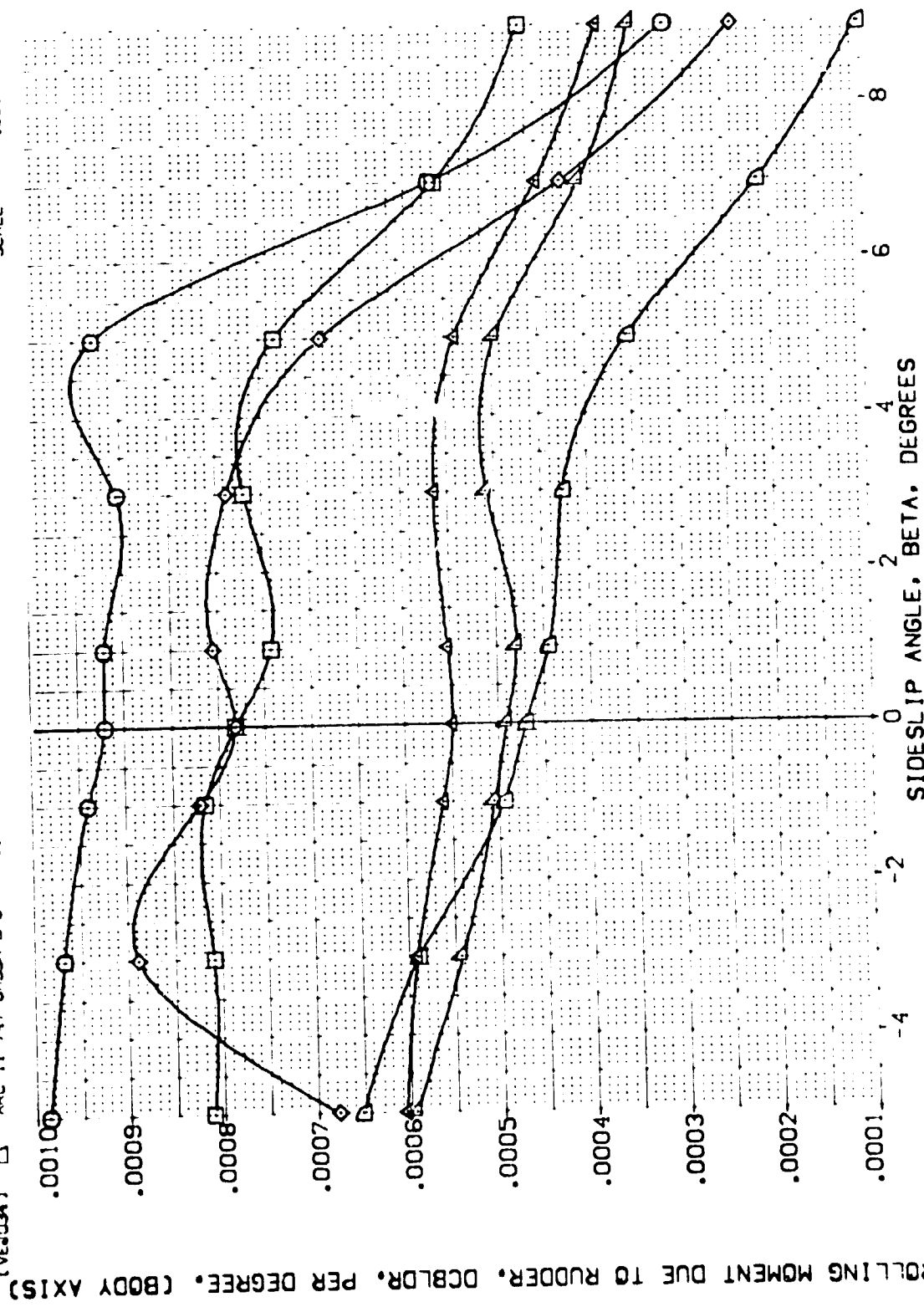


FIG. 22 RUDDER DERIVATIVES, SPEEDBRAKE 25 DEGREES

(C)MAC = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	DR	BOFLAP	SPOBRK	REFERENCE INFORMATION
VE0029	ARC 11-747 DA53A B C H F V	0.000	-10.000	-11.700	25.000	SREF 2.4210 SQ.FT.
VE0030	ARC 11-747 DA53A B C H F V	10.000	-10.000	-11.700	25.000	LREF 14.2440
VE0031	ARC 11-747 DA53A B C H F V	20.000	-10.000	-11.700	25.000	BREF 28.1004
VE0032	ARC 11-747 DA53A B C H F V	0.000	-25.000	-11.700	25.000	YARP 32.3010
VE0033	ARC 11-747 DA53A B C H F V	10.000	-25.000	-11.700	25.000	YARP 11.0000
VE0034	ARC 11-747 DA53A B C H F V	20.000	-25.000	-11.700	25.000	YARP 11.2500 SCALE

ROLLING MOMENT DUE TO RUDDER, DCBLDR, PER DEGREE, (BODY AXIS)

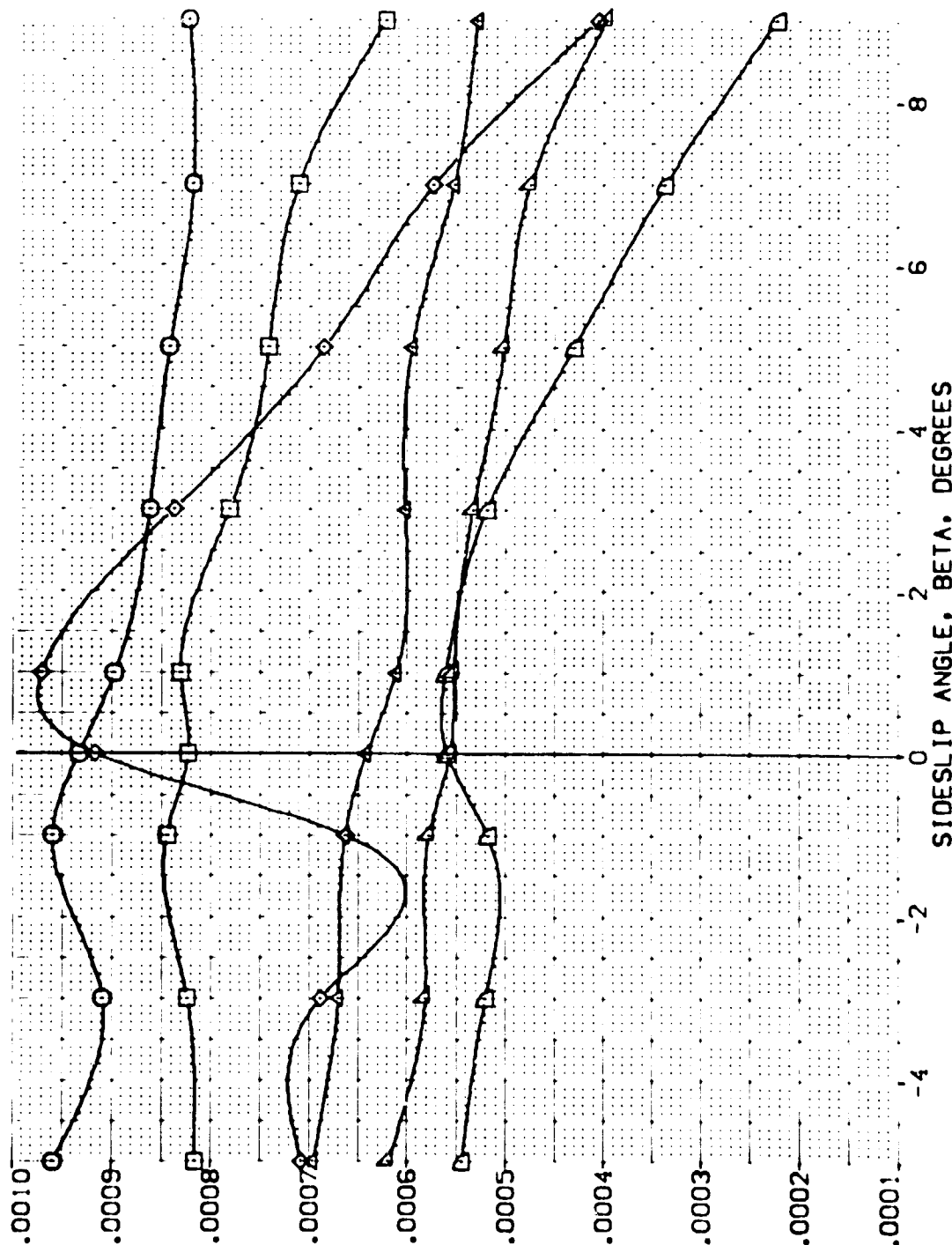


FIG. 22 RUDDER DERIVATIVES, SPEEDBRAKE 25 DEGREES

(0)MAC = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	DR	BDLAP	SPEEDBRK	REFERENCE INFORMATION
[VEJ079]	ARC 11-747 DA53A B C H F VI	0.000	-10.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[VEJ080]	ARC 11-747 DA53A B C H F VI	10.000	-10.000	-11.700	25.000	LREF 14.2440 IN.
[VEJ081]	ARC 11-747 DA53A B C H F VI	20.000	-10.000	-11.700	25.000	BREF 28.1004 IN.
[VEJ082]	ARC 11-747 DA53A B C H F VI	10.000	-25.000	-11.700	25.000	XMRP 32.3010 IN.
[VEJ083]	ARC 11-747 DA53A B C H F VI	20.000	-25.000	-11.700	25.000	YMRP 11.2500 IN.
[VEJ084]	ARC 11-747 DA53A B C H F VI	20.000	-25.000	-11.700	25.000	ZMRP 11.2500 IN.
						SCALE .0300

ROLLING MOMENT DUE TO RUDDER, DCBLDR, PER DEGREE, (BODY AXIS)

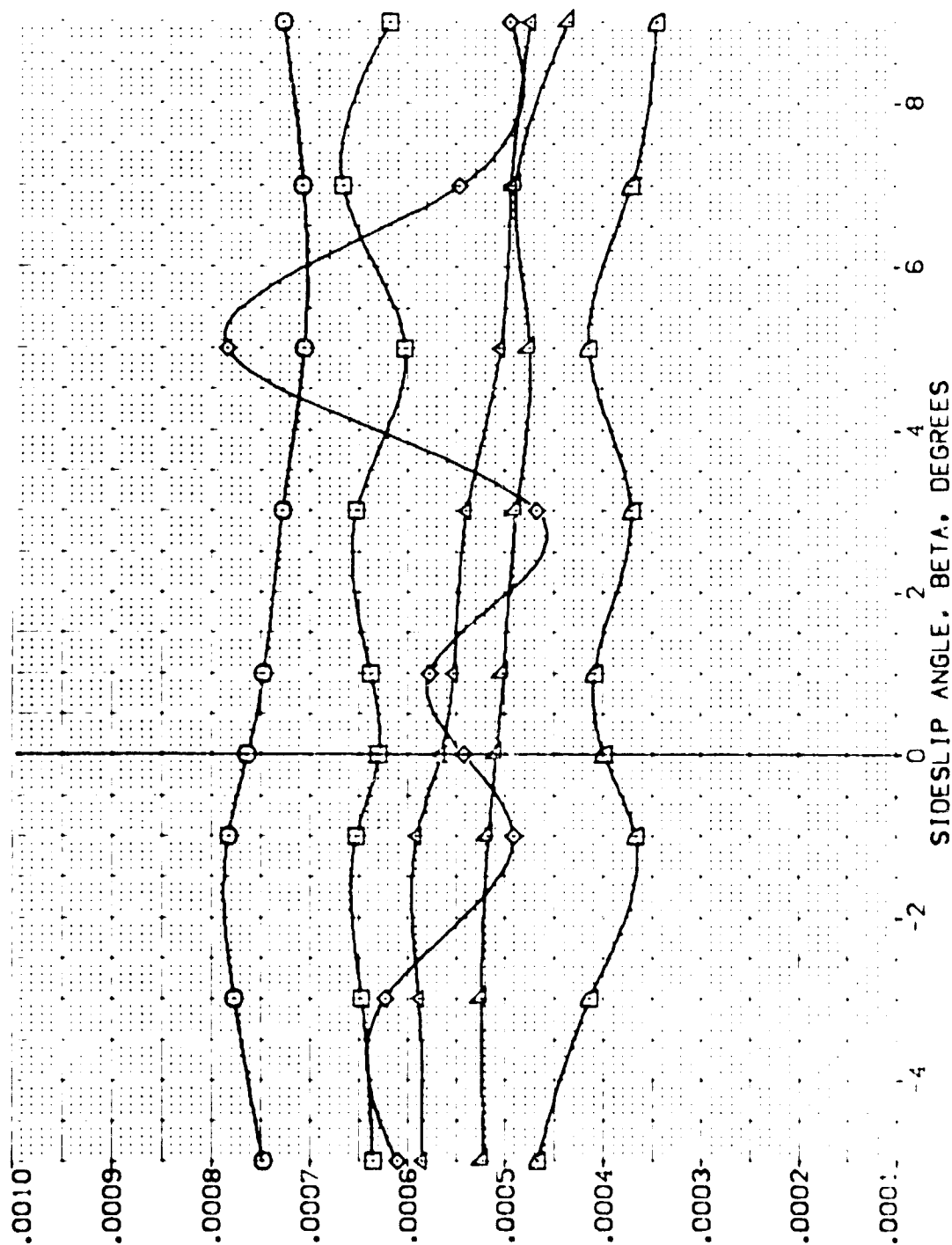


FIG. 22 RUDDER DERIVATIVES, SPEEDBRAKE 25 DEGREES

(EDMAC = 1.20)

DATA SET SYMBOL CONFIGURATION DESCRIPTION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	DR	BD/LAP	SPDBRK	REFERENCE INFORMATION
[VEJ028]	ARC 11-747 DA53A B C H F VI	0.000	-10.000	-11.700	25.000	SREF 2.4210 SQ. FT.
[VEJ030]	ARC 11-747 DA53A B C H F VI	10.000	-10.000	-11.700	25.000	LREF 14.2440
[VEJ031]	ARC 11-747 DA53A B C H F VI	20.000	-10.000	-11.700	25.000	BREF 28.1004
[VEJ032]	ARC 11-747 DA53A B C H F VI	10.000	-25.000	-11.700	25.000	XREF 32.3010
[VEJ033]	ARC 11-747 DA53A B C H F VI	20.000	-25.000	-11.700	25.000	YREF 11.2500
[VEJ034]	ARC 11-747 DA53A B C H F VI	20.000	-25.000	-11.700	25.000	ZREF 11.2500

SCALE .0300

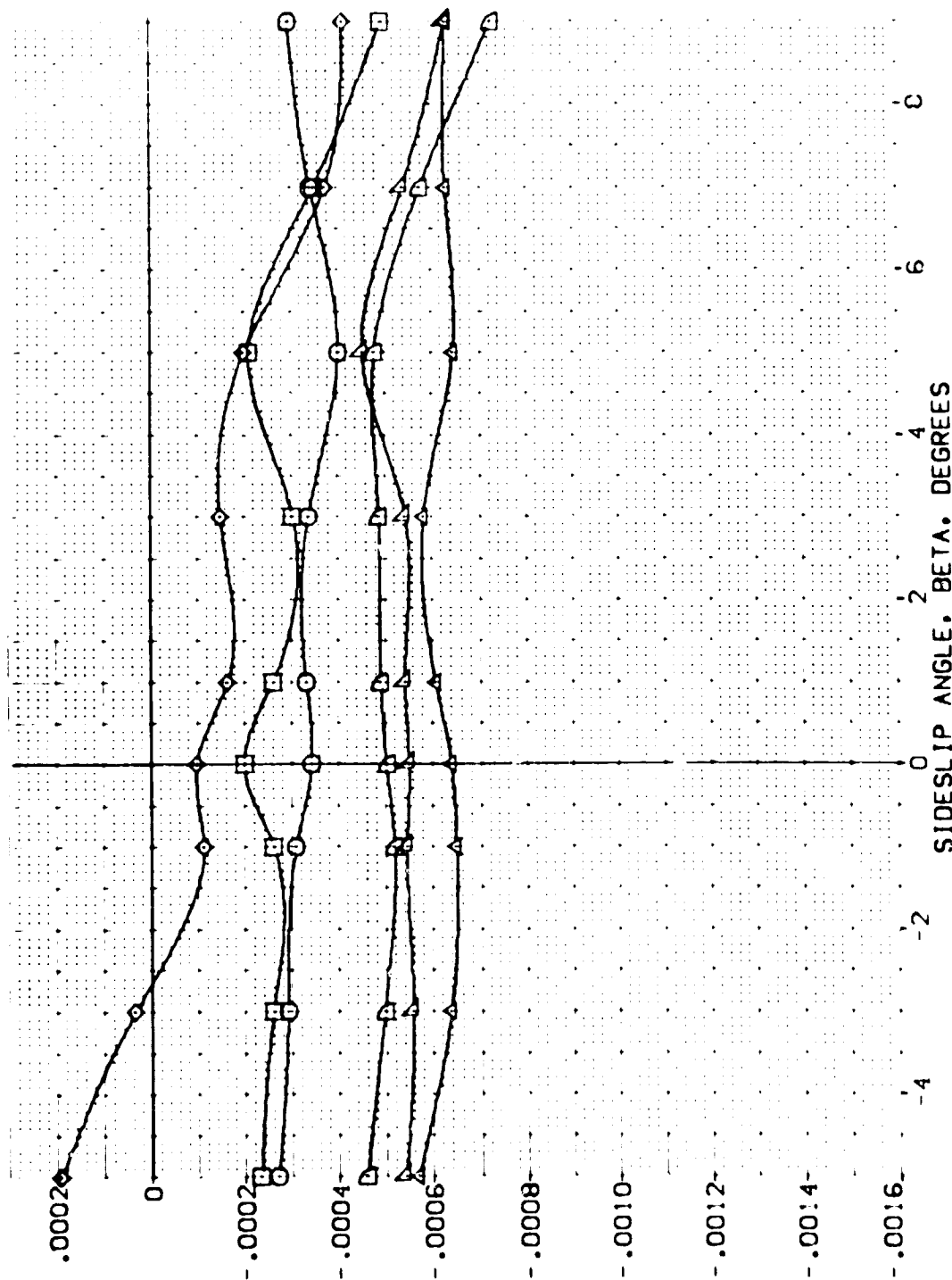


FIG. 22 RUDDER DERIVATIVES, SPEEDBRAKE 25 DEGREES

(A)MAC = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	DR	BOFLAP	SPEED	REFERENCE INFORMATION
(VEJ029)	ARC 11-747 OAS3A B C H F VI	0.000	-10.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(VEJ030)	ARC 11-747 OAS3A B C H F VI	10.000	-10.000	-11.700	25.000	LREF 14.2440 IN.
(VEJ031)	ARC 11-747 OAS3A B C H F VI	20.000	-10.000	-11.700	25.000	BREF 28.1004 IN.
(VEJ032)	ARC 11-747 OAS3A B C H F VI	10.000	-25.000	-11.700	25.000	XMRP 32.3010 IN.
(VEJ033)	ARC 11-747 OAS3A B C H F VI	20.000	-25.000	-11.700	25.000	YMRP 11.0000 IN.
(VEJ034)	ARC 11-747 OAS3A B C H F VI	20.000	-25.000	-11.700	25.000	ZMRP 11.0000 IN.
						SCALE .0300

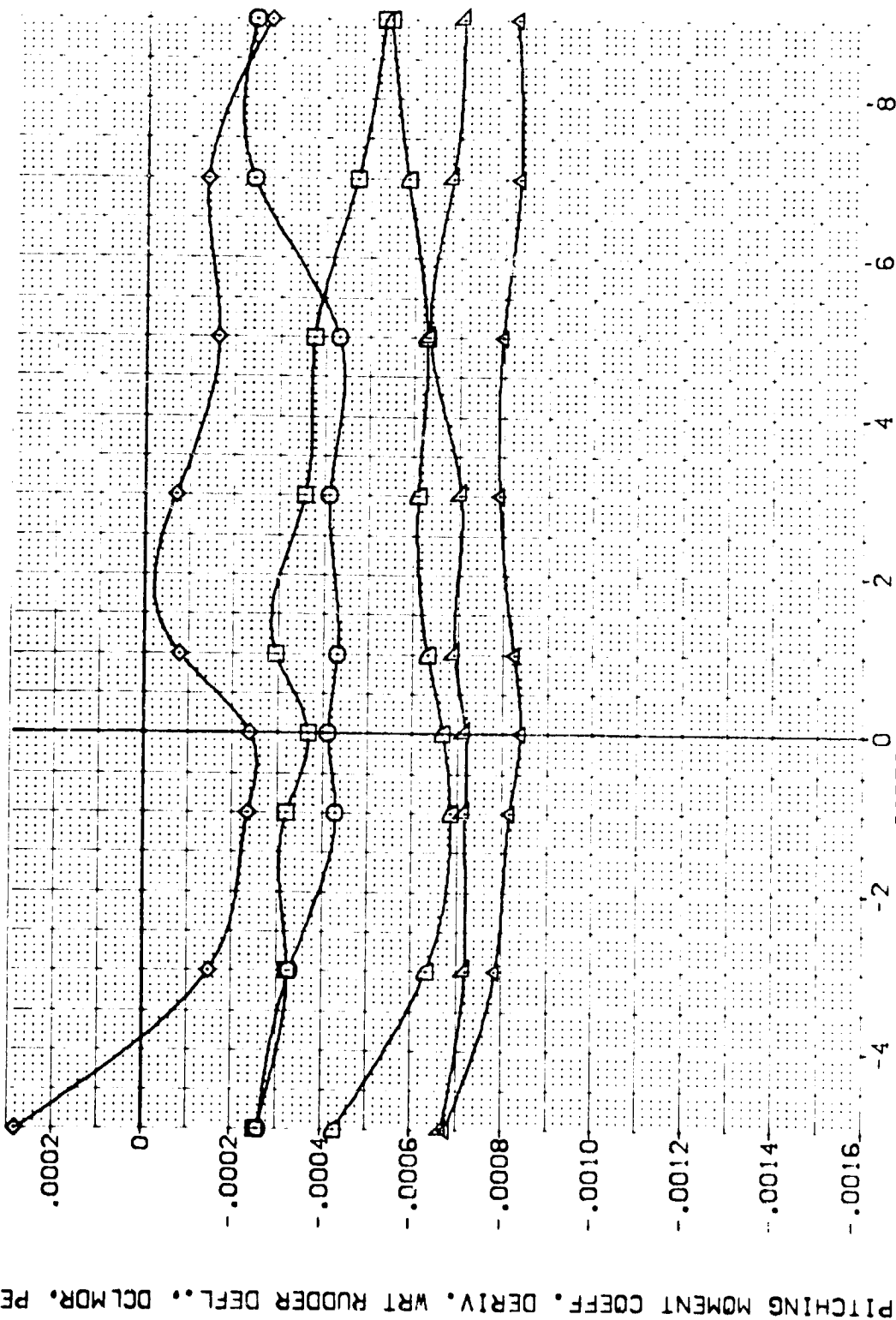


FIG. 22 RUDDER DERIVATIVES, SPEEDBRAKE 25 DEGREES

(B)MAC = .80



PITCHING MOMENT COEFF. DERIV. WRT RUDDER DEFL., DCLMDR, PER DEG

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	DR	BDF LAP	SPOBRK	REFERENCE INFORMATION
[VEJ029]	ARC 11-747 DA53A B C M F VI	0.000	-10.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[VEJ030]	ARC 11-747 DA53A B C M F VI	10.000	-10.000	-11.700	25.000	LREF 14.2140
[VEJ031]	ARC 11-747 DA53A B C M F VI	20.000	-10.000	-11.700	25.000	BREF 28.1004
[VEJ032]	ARC 11-747 DA53A B C M F VI	10.000	-25.000	-11.700	25.000	XMRP 32.3010
[VEJ033]	ARC 11-747 DA53A B C M F VI	10.000	-25.000	-11.700	25.000	YMRP 0.0000
[VEJ034]	ARC 11-747 DA53A B C M F VI	20.000	-25.000	-11.700	25.000	ZMRP 11.2500
						SCALE 11.0300

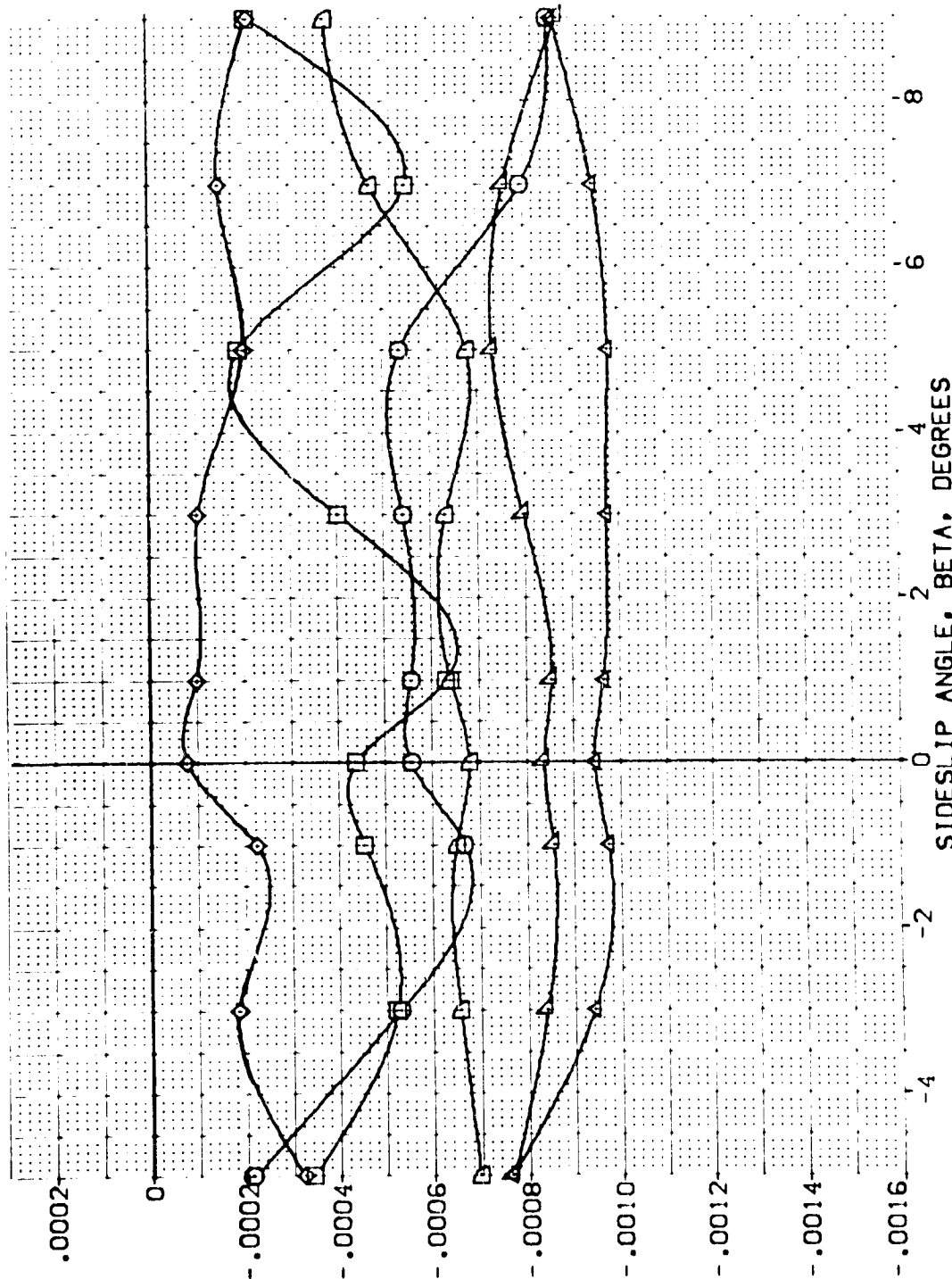


FIG. 22 RUDDER DERIVATIVES, SPEEDBRAKE 25 DEGREES

(C)MAC = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	DR	BOG LAP	SPEED	REFERENCE INFORMATION
VE0009	ARC 11-747 0453A 3 CUM F V	0.000	-10.000	-11.700	25.000	2.4210 SQFT.
VE0010	ARC 11-747 0453A 3 CUM F V	10.000	-10.000	-11.700	25.000	14.2440
VE0011	ARC 11-747 0453A 3 CUM F V	20.000	-10.000	-11.700	25.000	28.1000
VE0012	ARC 11-747 0453A 3 CUM F V	10.000	-25.000	-11.700	25.000	32.3000
VE0013	ARC 11-747 0453A 3 CUM F V	10.000	-25.000	-11.700	25.000	11.2500
VE0014	ARC 11-747 0453A 3 CUM F V	20.000	-25.000	-11.700	25.000	11.0000

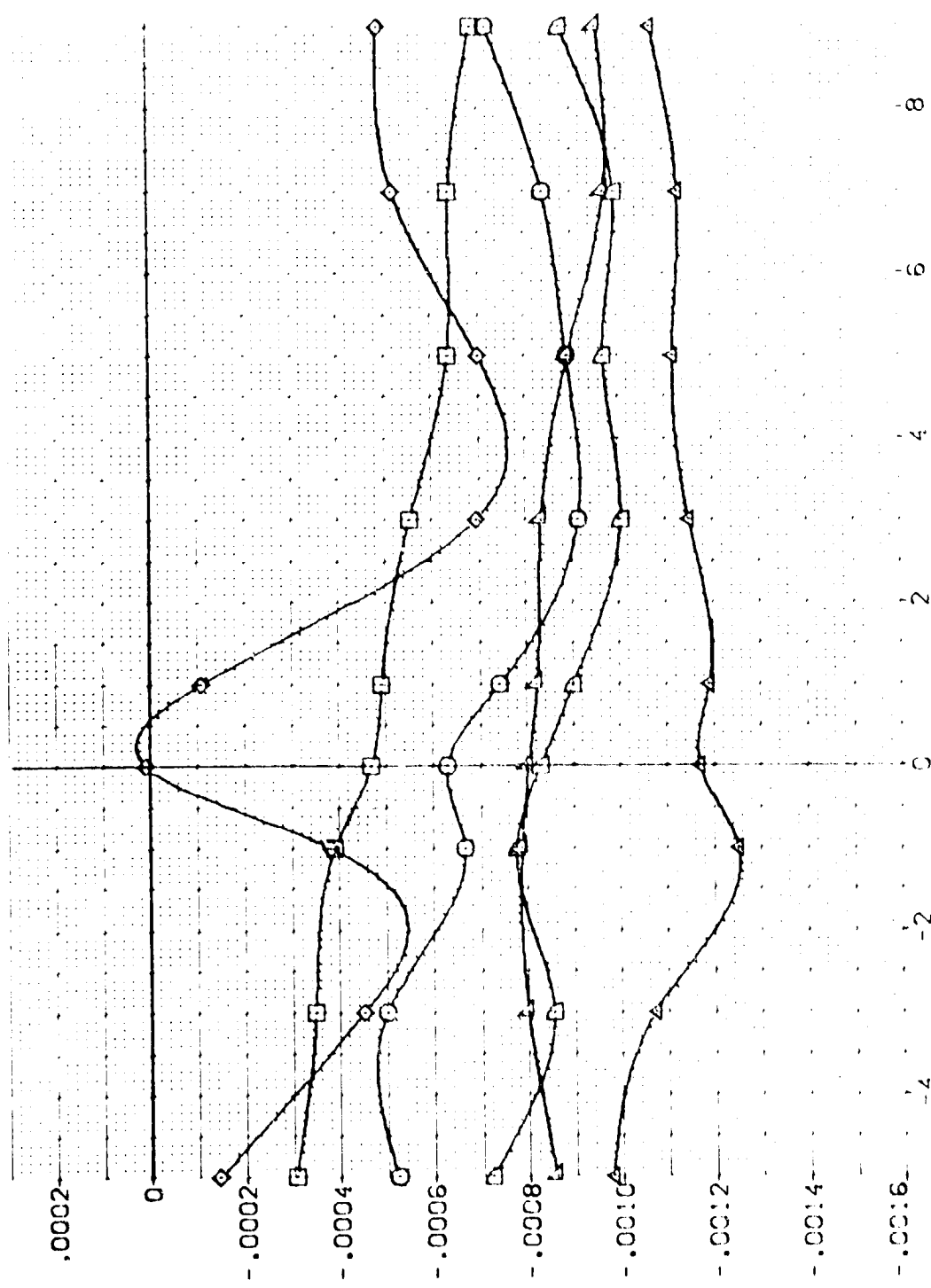


FIG. 22 RUDDER DERIVATIVES, SPEEDBRAKE 25 DEGREES

CONFIDENCE = 1.05

PITCHING MOMENT COEFF. DERIV. WRT RUDDER DEFL., DCLMR, PER DEG

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	DR	BOFLAP	SPEEDBRAK	REFERENCE INFORMATION
VEJ029	ARC 11-747 BA53A B C M F V	0.000	-10.000	-11.700	25.000	SREF 2.4210 SQ.FT.
VEJ030	ARC 11-747 BA53A B C M F V	10.000	-10.000	-11.700	25.000	REF 14.2440
VEJ031	ARC 11-747 BA53A B C M F V	20.000	-10.000	-11.700	25.000	REF 28.0004
VEJ032	ARC 11-747 BA53A B C M F V	10.000	-25.000	-11.700	25.000	REF 32.0010
VEJ033	ARC 11-747 BA53A B C M F V	10.000	-25.000	-11.700	25.000	REF 11.2500
VEJ034	ARC 11-747 BA53A B C M F V	20.000	-25.000	-11.700	25.000	SCALE 1.0300

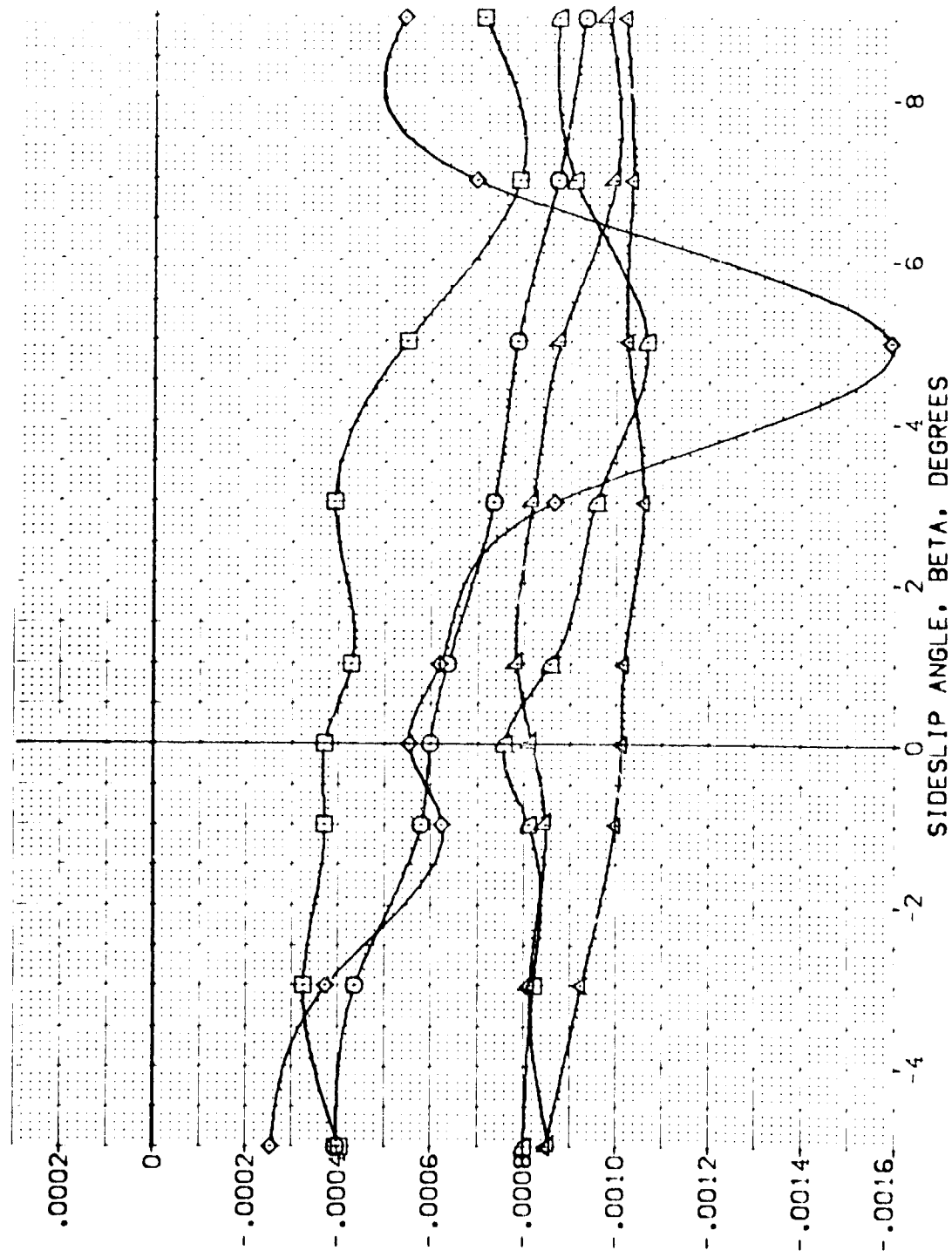


FIG. 22 RUDDER DERIVATIVES, SPEEDBRAKE 25 DEGREES

CEJMAC = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	DR	BOLAP	SPOBRK	REFERENCE INFORMATION
(VEJ035)	ARC 11-747 BA53A B C H F V	0.000	-10.000	-11.700	55.000	SREF 2.4210 SQ.FT.
(VEJ036)	ARC 11-747 BA53A B C H F V	10.000	-10.000	-11.700	55.000	LREF 14.2440
(VEJ037)	ARC 11-747 BA53A B C H F V	20.000	-10.000	-11.700	55.000	BREF 28.1004
(VEJ038)	ARC 11-747 BA53A B C H F V	10.000	-25.000	-11.700	55.000	AHREF 32.3010
(VEJ039)	ARC 11-747 BA53A B C H F V	20.000	-25.000	-11.700	55.000	YHREF 11.2500
(VEJ040)	ARC 11-747 BA53A B C H F V	10.000	-25.000	-11.700	55.000	ZHREF 11.2500
						SCALE .0300

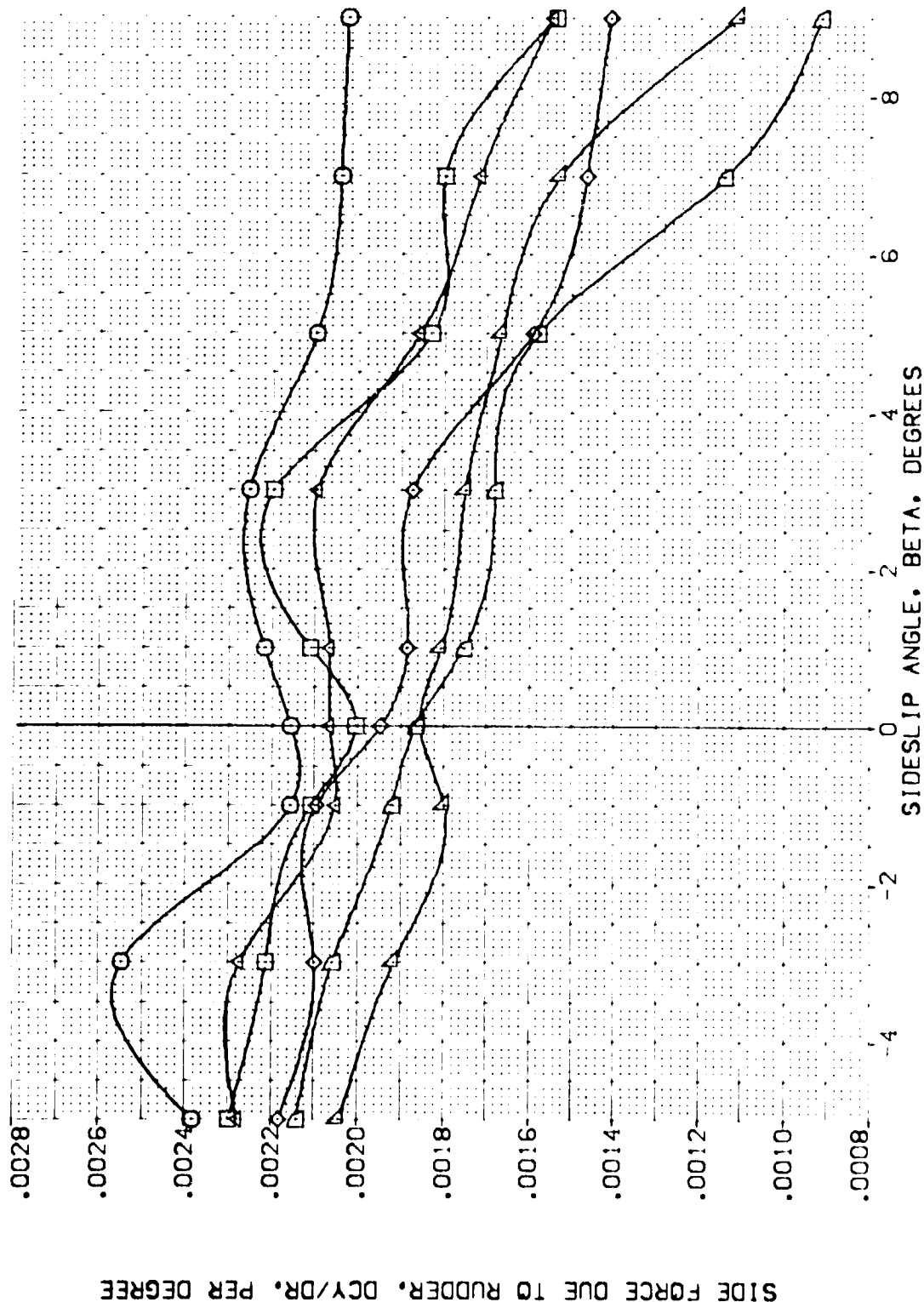


FIG. 23 RUDDER DERIVATIVES, SPEEDBRAKE 55 DEGREES

(A)MAC = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	DR	BOFLAP	SPEEDBRAK	REFERENCE INFORMATION
[VE-035]	ARC 11-747 D-53A B C H F V	0.000	-10.000	-11.700	55.000	SREF 2.4210 SQ.FT.
[VE-036]	ARC 11-747 D-53A B C H F V	10.000	-10.000	-11.700	55.000	LREF 14.2440
[VE-037]	ARC 11-747 D-53A B C H F V	20.000	-10.000	-11.700	55.000	BREF 28.1004
[VE-038]	ARC 11-747 D-53A B C H F V	0.000	-25.000	-11.700	55.000	XREF 32.3010
[VE-039]	ARC 11-747 D-53A B C H F V	10.000	-25.000	-11.700	55.000	YREF 11.2500
[VE-040]	ARC 11-747 D-53A B C H F V	20.000	-25.000	-11.700	55.000	ZREF 0.0000
						SCALE 0.0000
						SCALE 0.0000

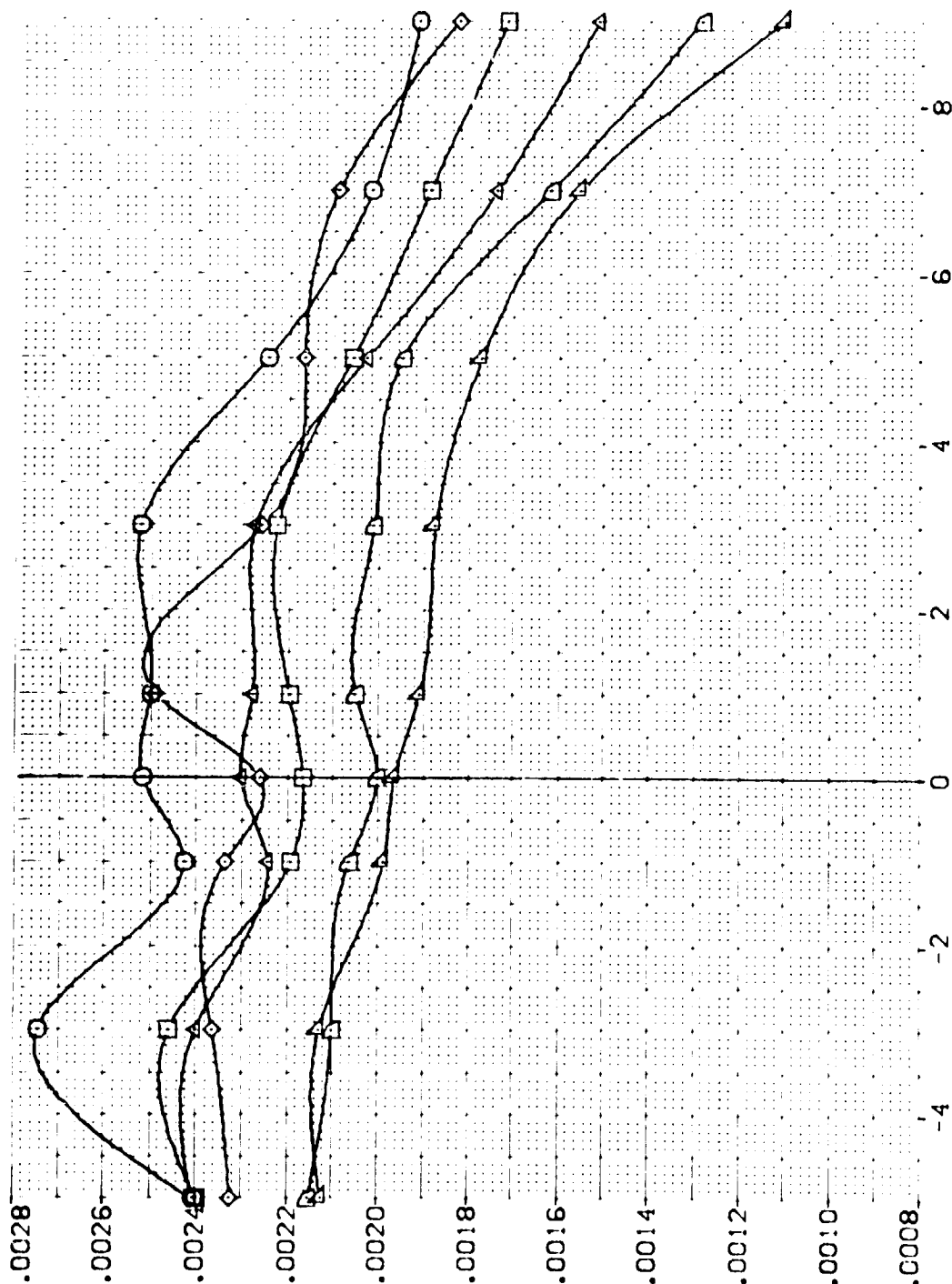


FIG. 23 RUDDER DERIVATIVES, SPEEDBRAKE 55 DEGREES

(3)  $M_{AC} = .80$

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NO.	RV/L	ALPHA	DR	BOLAP	SPOBRK	REFERENCE INFORMATION
[VEJ036]	ARC 11-747 DAS3A B C M F VI	Y	RV/L	.000	-10.000	-11.700	55.000	SREF 2.4210 SQ.FT.
[VEJ036]	ARC 11-747 DAS3A B C M F VI	Y	RV/L	10.000	-10.000	-11.700	55.000	LREF 14.2440 IN.
[VEJ037]	ARC 11-747 DAS3A B C M F VI	Y	RV/L	20.000	-10.000	-11.700	55.000	BREF 28.1004 IN.
[VEJ051]	ARC 11-747 DAS3A B C M F VI	Y	RV/L	10.000	-25.000	-11.700	55.000	XMRP 32.3010 IN.
[VEJ052]	ARC 11-747 DAS3A B C M F VI	Y	RV/L	10.000	-25.000	-11.700	55.000	YMRP 11.2500 IN.
[VEJ053]	ARC 11-747 DAS3A B C M F VI	Y	RV/L	20.000	-25.000	-11.700	55.000	ZMRP 11.2500 IN.
								SCALE .0300

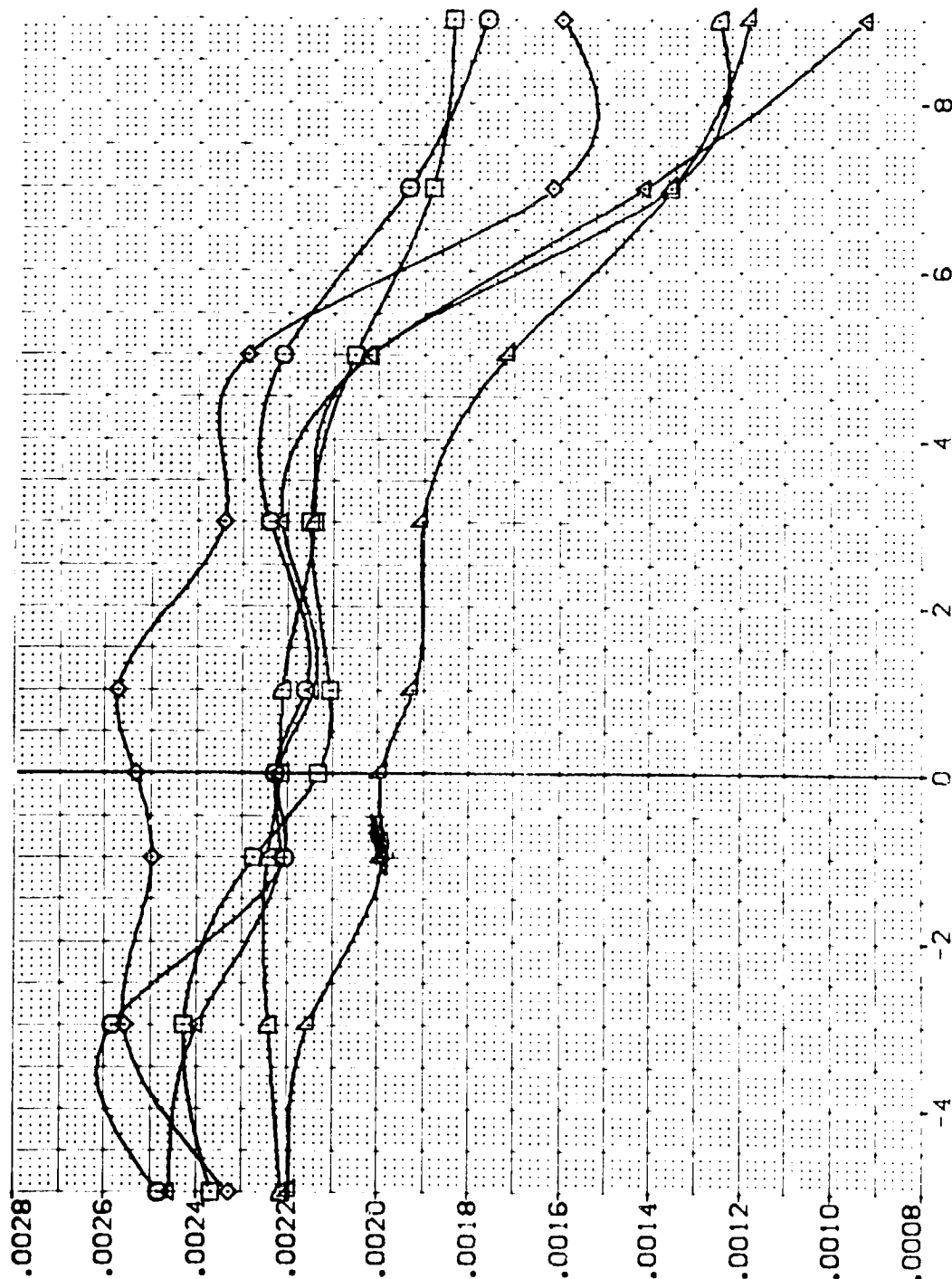


FIG. 23 RUDDER DERIVATIVES, SPEEDBRAKE 55 DEGREES

(C)MAC = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	DR	BOFLAP	SPEEDBRK	REFERENCE INFORMATION
[VE4035]	ARC 11-747 D453A B C M F V	0.000	-10.000	-11.700	55.000	SREF 2.4210 SQ.FT.
[VE4036]	ARC 11-747 D453A B C M F V	10.000	-10.000	-11.700	55.000	UREF 14.2440
[VE4037]	ARC 11-747 D453A B C M F V	20.000	-10.000	-11.700	55.000	BRF 28.004
[VE4038]	ARC 11-747 D453A B C M F V	10.000	-25.000	-11.700	55.000	AREF 32.3010
[VE4039]	ARC 11-747 D453A B C M F V	20.000	-25.000	-11.700	55.000	YREF 11.2500
[VE4040]	ARC 11-747 D453A B C M F V	20.000	-25.000	-11.700	55.000	ZREF 10.3000
						SCALE

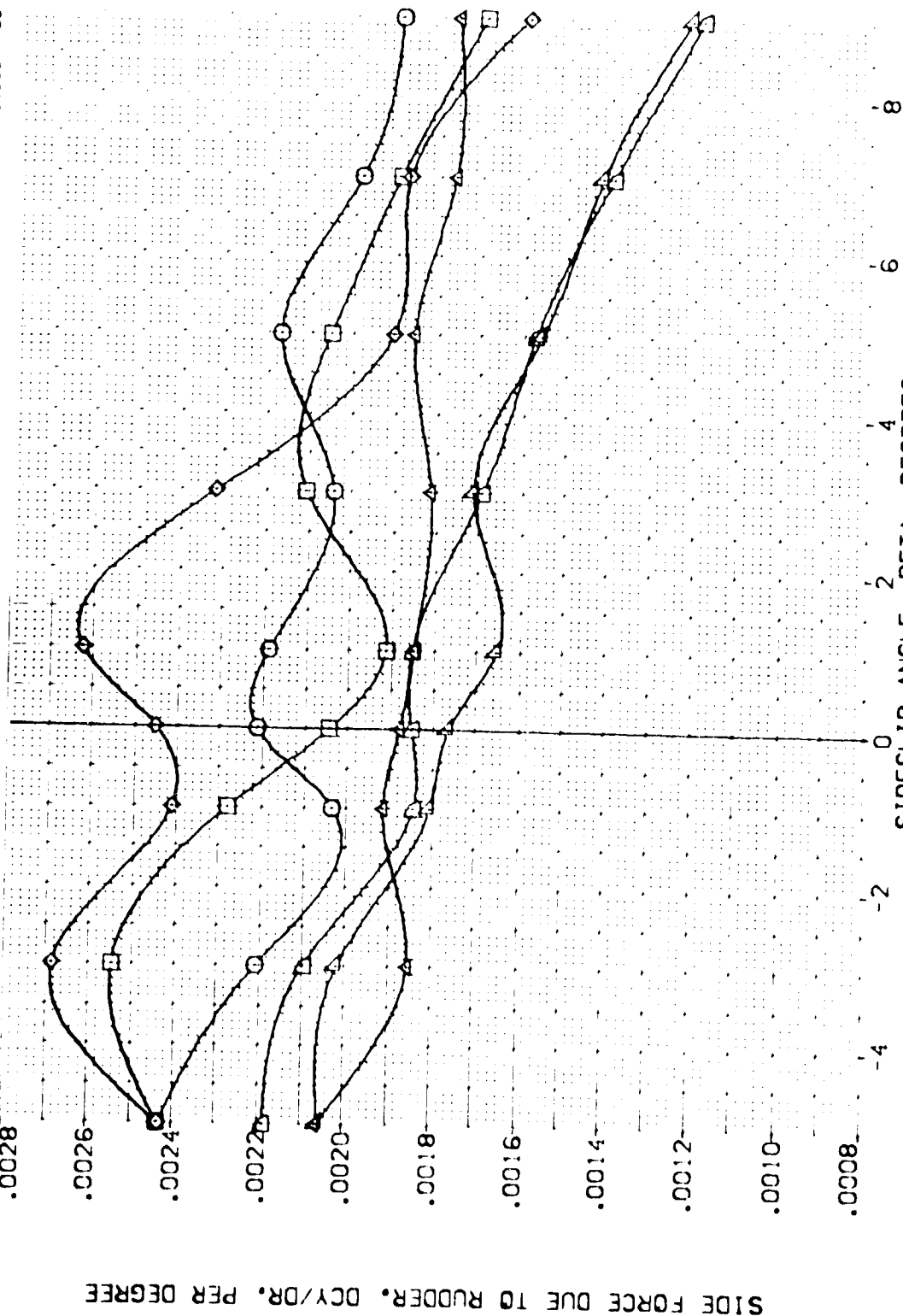
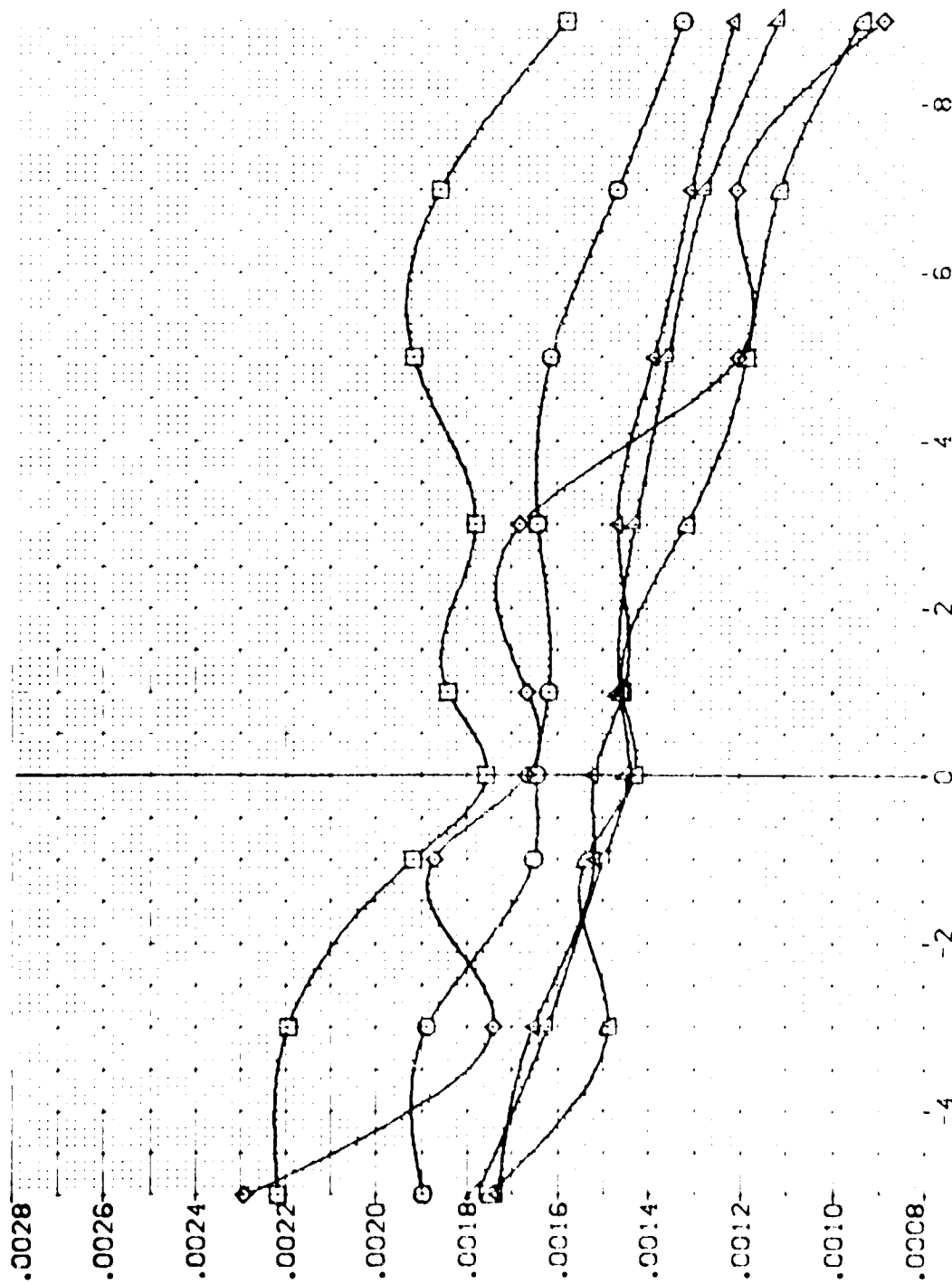


FIG. 23 RUDDER DERIVATIVES, SPEEDBRAKE 55 DEGREES

(C)MAC = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	DR	BD LAP	SPEED	REFERENCE INFORMATION
(A4005)	ARC 11-747 D-53A B C H F V	0.000	-10.000	-11.700	55.000	SREF 2.4210 SQ.FT.
(A4006)	ARC 11-747 D-53A B C H F V	10.000	-10.000	-11.700	55.000	LREF 14.2440
(A4007)	ARC 11-747 D-53A B C H F V	20.000	-10.000	-11.700	55.000	BREF 28.0004
(A4008)	ARC 11-747 D-53A B C H F V	10.000	-20.000	-11.700	55.000	MREF 32.0000
(A4009)	ARC 11-747 D-53A B C H F V	20.000	-20.000	-11.700	55.000	YREF 11.0000
(A4010)	ARC 11-747 D-53A B C H F V	20.000	-20.000	-11.700	55.000	ZREF 11.2500
						SCALE .0300



SIDE FORCE DUE TO RUDDER, DCY/DR, PER DEGREE

SIDESLIP ANGLE, BETA, DEGREES

FIG. 23 RUDDER DERIVATIVES, SPEEDBRAKE 55 DEGREES



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	DR	BOFLAP	SPEEDBRK	REFERENCE INFORMATION
(VEJ005)	ARC 11-747 OAS3A B C H F VI	0.000	-10.000	-11.700	55.000	SREF 2.4210 SQ.FT.
(VEJ006)	ARC 11-747 OAS3A B C H F VI	10.000	-10.000	-11.700	55.000	LREF 14.2440
(VEJ037)	ARC 11-747 OAS3A B C H F VI	20.000	-10.000	-11.700	55.000	BREF 28.1004
(VEJ051)	ARC 11-747 OAS3A B C H F VI	10.000	-20.000	-11.700	55.000	XREF 32.3010
(VEJ052)	ARC 11-747 OAS3A B C H F VI	10.000	-20.000	-11.700	55.000	YREF 11.2500
(VEJ053)	ARC 11-747 OAS3A B C H F VI	20.000	-20.000	-11.700	55.000	SCALE .6300

YAWING MOMENT DUE TO RUDDER, DCYNDR, PER DEGREE, (BODY AXIS)

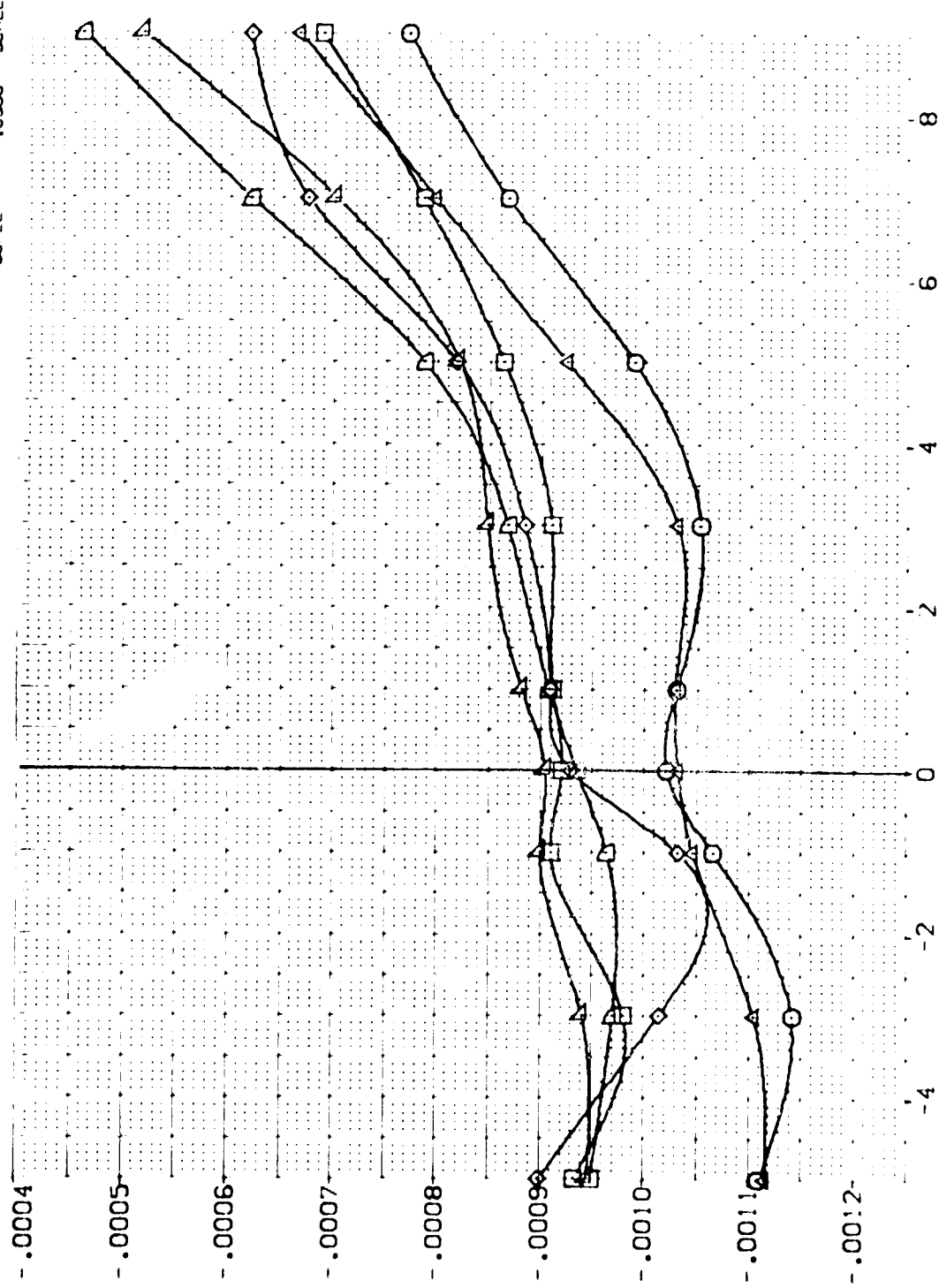


FIG. 23 RUDDER DERIVATIVES, SPEEDBRAKE 55 DEGREES

(A) MAC = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	DR	BDF LAP	SPOBRK	REFERENCE INFORMATION
[VE:036]	ARC 11-747 0A53A B C H F VI	0.000	-10.000	-11.700	55.000	SREF 2.4210 SC.FT.
[VE:036]	ARC 11-747 0A53A B C H F VI	10.000	-10.000	-11.700	55.000	REF 14.2440
[VE:037]	ARC 11-747 0A53A B C H F VI	20.000	-10.000	-11.700	55.000	SREF 28.1004
[VE:037]	ARC 11-747 0A53A B C H F VI	10.000	-2.000	-11.700	55.000	REF 32.3010
[VE:037]	ARC 11-747 0A53A B C H F VI	10.000	-2.000	-11.700	55.000	YREF 11.0000
[VE:037]	ARC 11-747 0A53A B C H F VI	20.000	-2.000	-11.700	55.000	ZREF 11.7500
[VE:037]	ARC 11-747 0A53A B C H F VI	20.000	-2.000	-11.700	55.000	SCALE 1.0300

YAWING MOMENT DUE TO RUDDER, DCYNDR, PER DEGREE, (BODY AXIS)

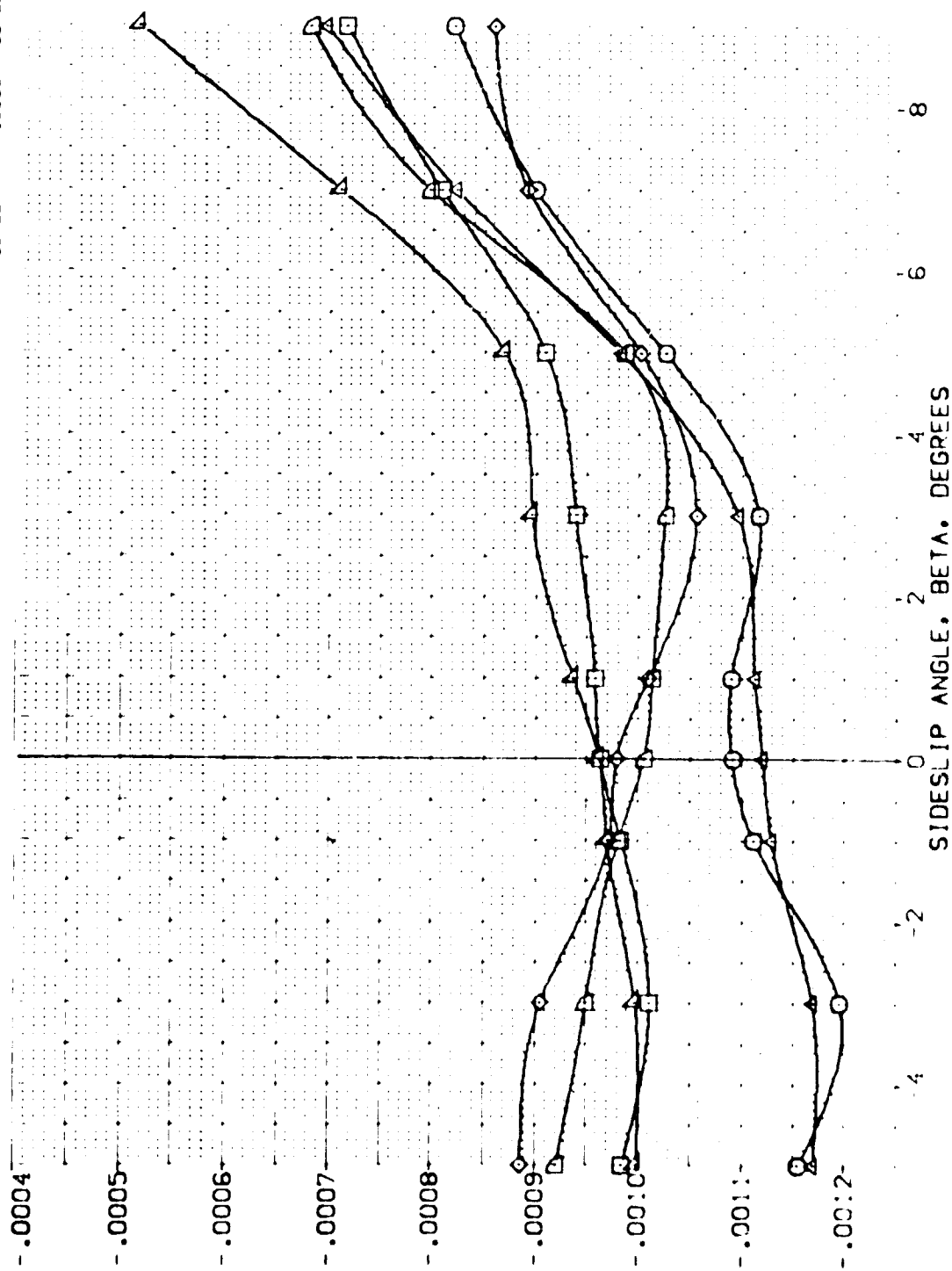


FIG. 23 RUDDER DERIVATIVES, SPEEDBRAKE 55 DEGREES

(B)MAG .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NON.	RV/L	ALPHA	DR	BD FLAP	SPOBRK	REFERENCE INFORMATION
[VEJ005]	ARC 11-747 OA53A B C H F V	V	RV/L	.000	-10.000	-11.700	55.000	SREF 2.4210 SQ.FT.
[VEJ006]	ARC 11-747 OA53A B C H F V	V	RV/L	10.000	-10.000	-11.700	55.000	LREF 14.2410 IN.
[VEJ007]	ARC 11-747 OA53A B C H F V	V	RV/L	20.000	-10.000	-11.700	55.000	BREF 28.1004 IN.
[VEJ051]	ARC 11-747 OA53A B C H F V	V	RV/L	.000	-25.000	-11.700	55.000	XMRP 32.3010 IN.
[VEJ052]	ARC 11-747 OA53A B C H F V	V	RV/L	10.000	-25.000	-11.700	55.000	YMRP 11.2500 IN.
[VEJ053]	ARC 11-747 OA53A B C H F V	V	RV/L	20.000	-25.000	-11.700	55.000	ZMRP 11.2500 IN.
								SCALE .0000

YAWING MOMENT DUE TO RUDDER, DCYNDR. PER DEGREE, (BODY AXIS)

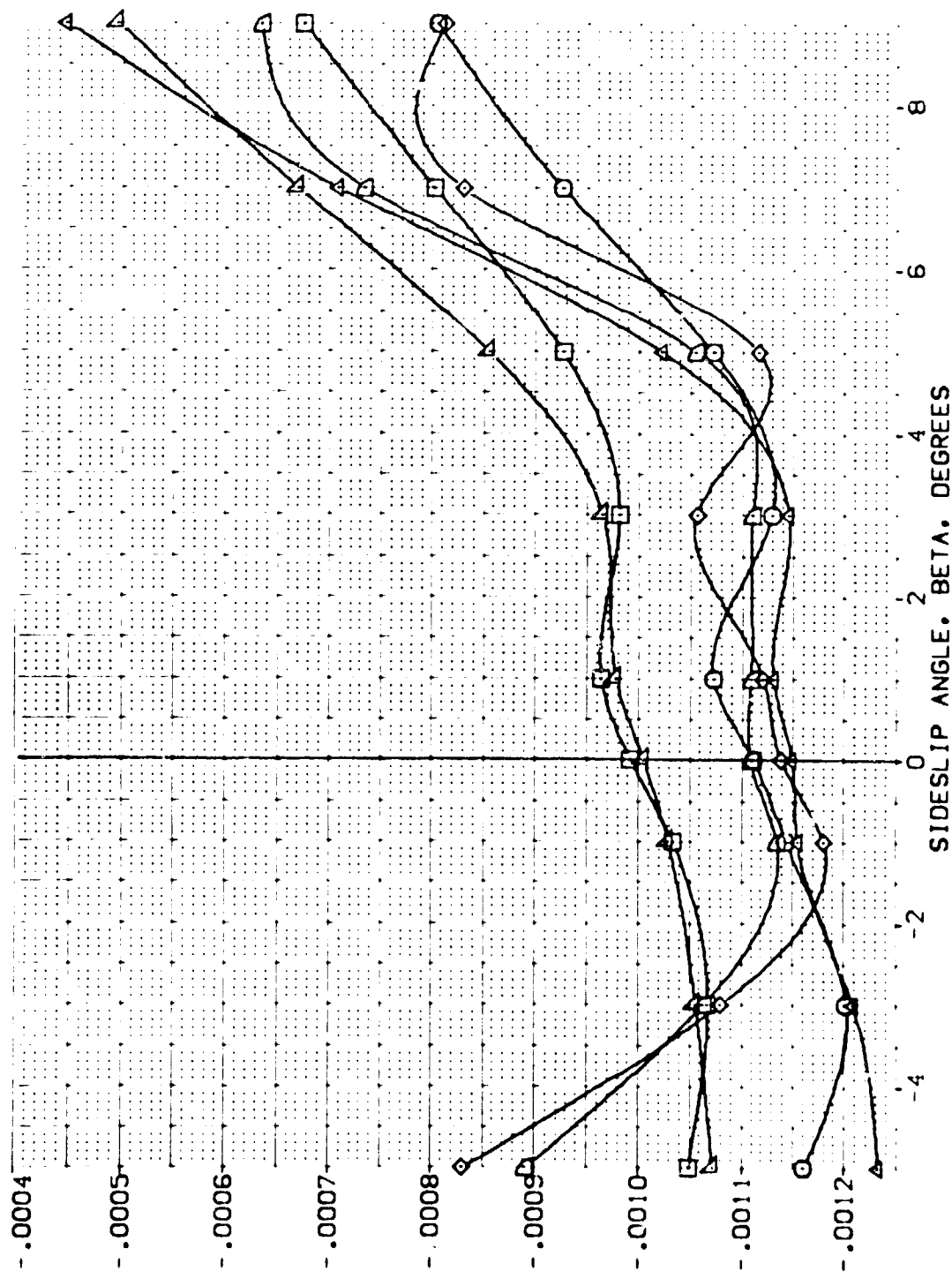


FIG. 23 RUDDER DERIVATIVES, SPEEDBRAKE 55 DEGREES

(C)MAC = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	DR	BOFLAP	SPEED	REFERENCE INFORMATION
(VEJ005)	ARC 11-747 D453A B C M F V1 V	0.000	-10.000	-11.700	55.000	SREF 2.4210 50.000
(VEJ006)	ARC 11-747 D453A B C M F V1 V	10.000	-10.000	-11.700	55.000	LREF 14.2440 1.000
(VEJ007)	ARC 11-747 D453A B C M F V1 V	20.000	-10.000	-11.700	55.000	BREF 28.1000 2.000
(VEJ008)	ARC 11-747 D453A B C M F V1 V	10.000	-25.000	-11.700	55.000	AHREF 32.3010 2.000
(VEJ009)	ARC 11-747 D453A B C M F V1 V	20.000	-25.000	-11.700	55.000	YHREF 11.2500 1.000
(VEJ010)	ARC 11-747 D453A B C M F V1 V	20.000	-25.000	-11.700	55.000	ZHREF 11.2500 1.000
						SCALE .0300

YAWING MOMENT DUE TO RUDDER, DCYNDR, PER DEGREE, (BODY AXIS)

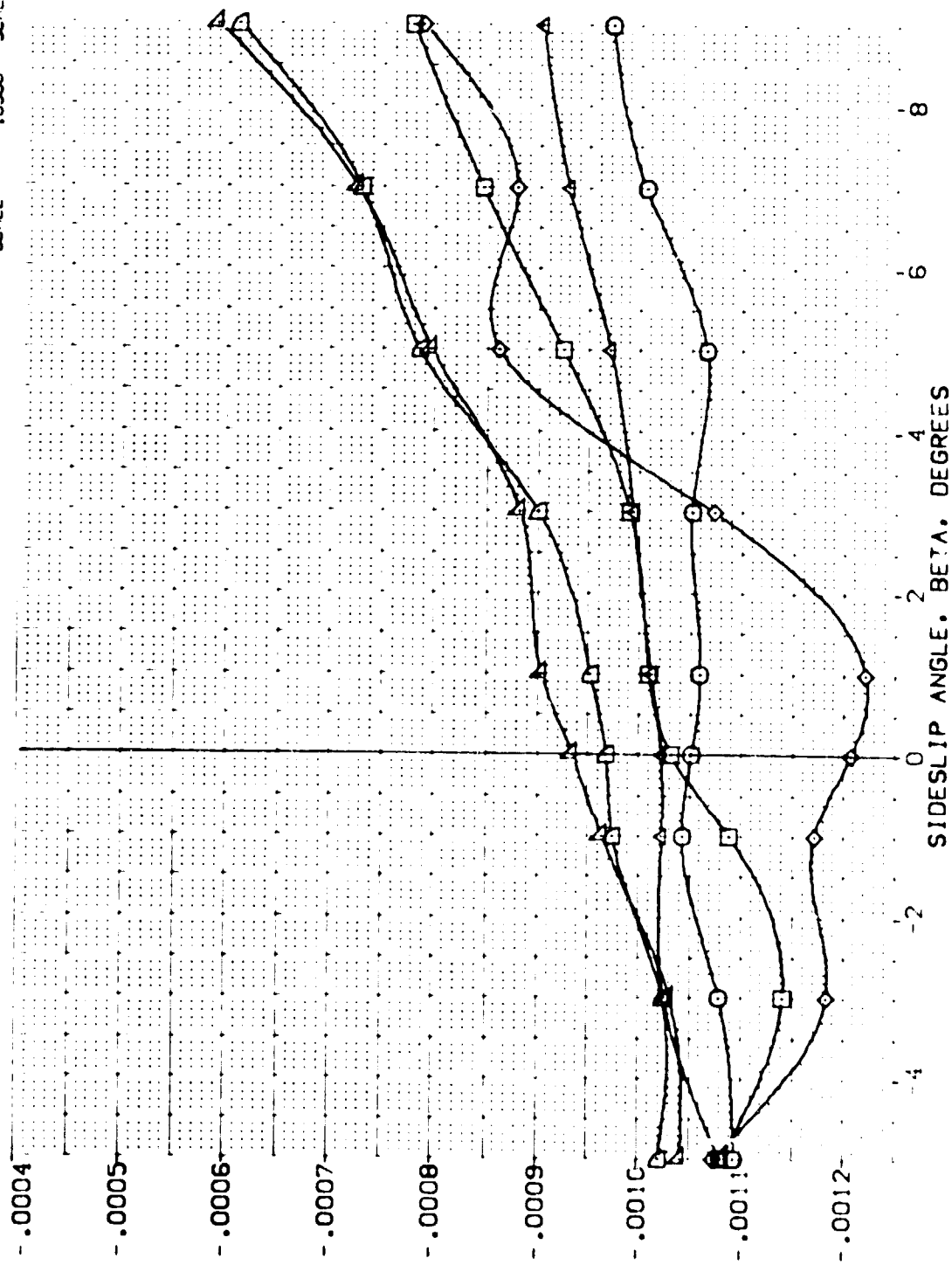


FIG. 23 RUDDER DERIVATIVES, SPEEDBRAKE 55 DEGREES

(C)MAC 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	DR	BDLAP	SPEED	REFERENCE INFORMATION
[VEJ035]	ARC 11-747 D453A B C M F V	0.000	-10.000	-11.700	55.000	SREF 2.4210 SQ.FT.
[VEJ036]	ARC 11-747 D453A B C M F V	10.000	-10.000	-11.700	55.000	LREF 14.2440
[VEJ037]	ARC 11-747 D453A B C M F V	20.000	-10.000	-11.700	55.000	BREF 28.1004
[VEJ038]	ARC 11-747 D453A B C M F V	10.000	-25.000	-11.700	55.000	XREF 32.3010
[VEJ039]	ARC 11-747 D453A B C M F V	10.000	-25.000	-11.700	55.000	YREF 11.2500
[VEJ040]	ARC 11-747 D453A B C M F V	10.000	-25.000	-11.700	55.000	ZREF 11.2500
						SCALE .0300

YAWING MOMENT DUE TO RUDDER, DCYNDR. PER DEGREE, (BODY AXIS)

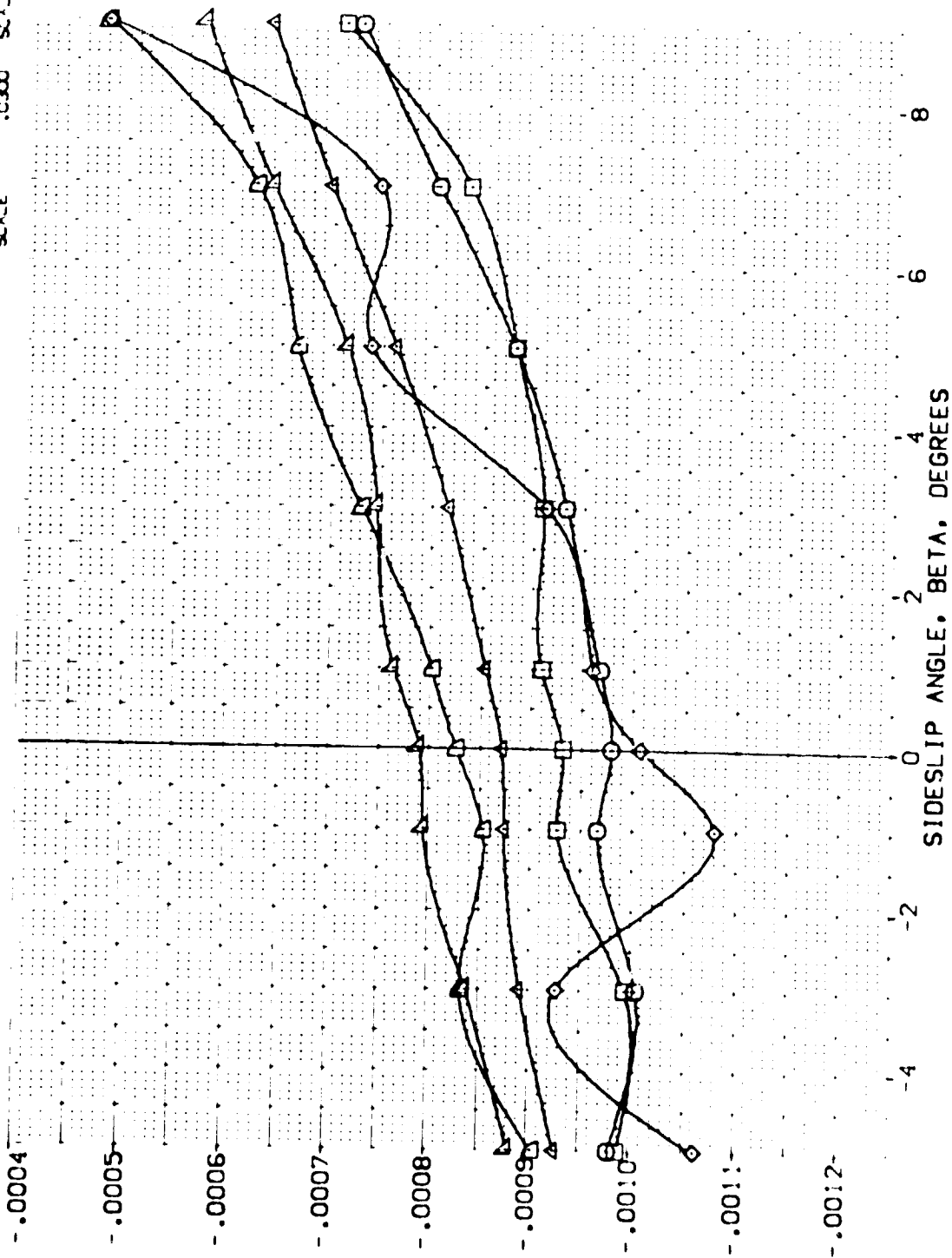


FIG. 23 RUDDER DERIVATIVES, SPEEDBRAKE 55 DEGREES

CEMAG = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	DR	BOFLAP	SPDRBK	REFERENCE INFORMATION
(VE1035)	ARC 11-747 DA53A B C M F V1	0.000	-10.000	-11.700	55.000	SREF 2.4210 SQ.FT.
(VE1036)	ARC 11-747 DA53A B C M F V1	10.000	-10.000	-11.700	55.000	LREF 14.2440
(VE1037)	ARC 11-747 DA53A B C M F V1	20.000	-10.000	-11.700	55.000	BREF 28.1004
(VE1051)	ARC 11-747 DA53A B C M F V1	10.000	-25.000	-11.700	55.000	XMRP 32.3010
(VE1052)	ARC 11-747 DA53A B C M F V1	20.000	-25.000	-11.700	55.000	YMRP 11.2500
(VE1053)	ARC 11-747 DA53A B C M F V1	20.000	-25.000	-11.700	55.000	ZMRP 11.2500
						SCALE .0300

ROLLING MOMENT DUE TO RUDDER, DCBLDR, PER DEGREE, (BODY AXIS)

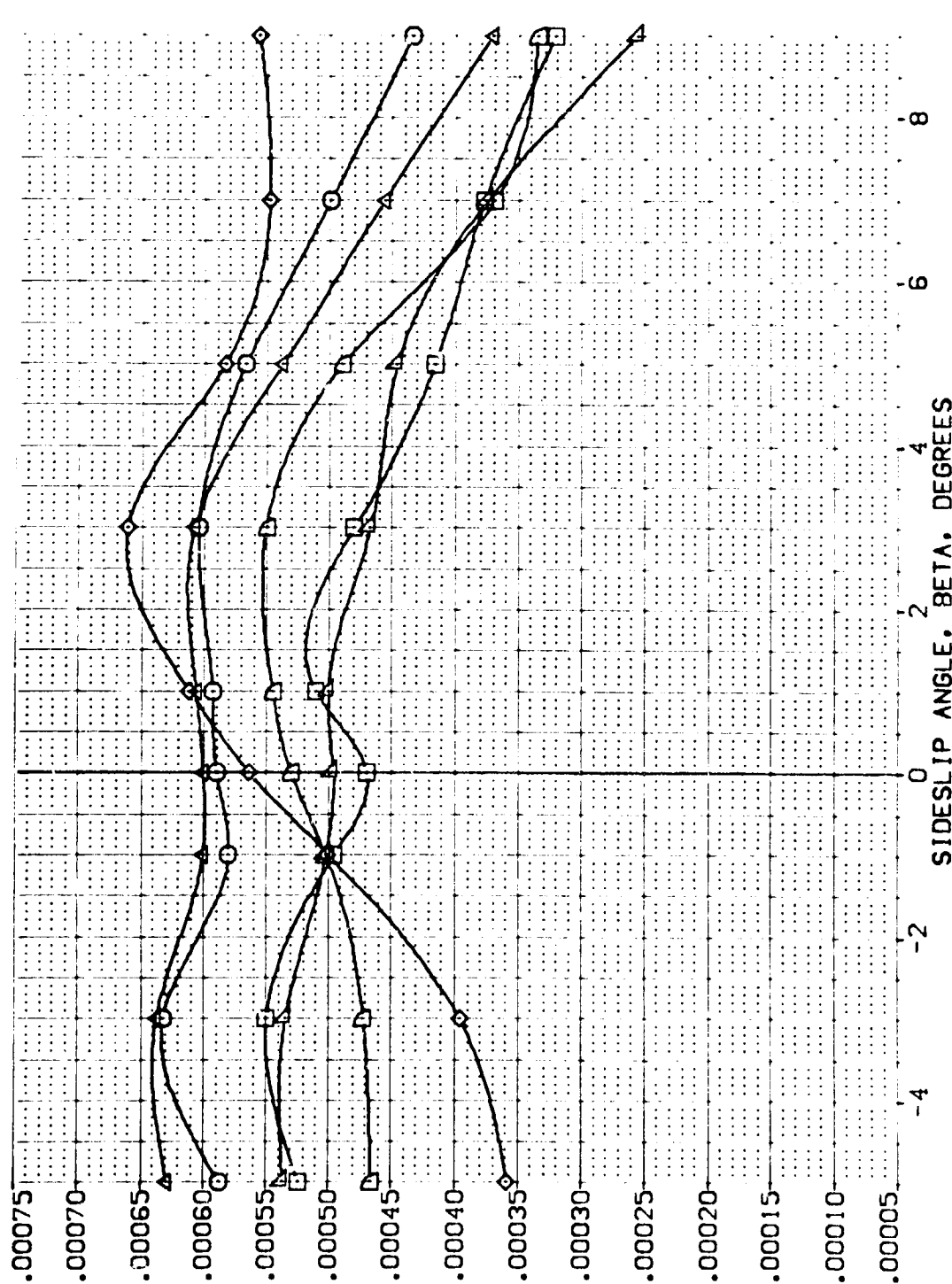


FIG. 23 RUDDER DERIVATIVES, SPEEDBRAKE 55 DEGREES

(A)MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	DR	BD/LAP	SPEED	REFERENCE INFORMATION
[VEJ035]	ARC 11-747 OAS3A B C M F VI V	0.000	-10.000	-11.700	55.000	SREF 2.4210 SQ.FT.
[VEJ036]	ARC 11-747 OAS3A B C M F VI V	10.000	-10.000	-11.700	55.000	LREF 14.2440 IN.
[VEJ037]	ARC 11-747 OAS3A B C M F VI V	20.000	-10.000	-11.700	55.000	BREF 28.1004 IN.
[VEJ051]	ARC 11-747 OAS3A B C M F VI V	0.000	-25.000	-11.700	55.000	XMRP 32.3010 IN.
[VEJ052]	ARC 11-747 OAS3A B C M F VI V	10.000	-25.000	-11.700	55.000	YMRP .0000 IN.
[VEJ053]	ARC 11-747 OAS3A B C M F VI V	20.000	-25.000	-11.700	55.000	ZMRP 11.2500 IN.
						SCALE .0300

ROLLING MOMENT DUE TO RUDDER, DCBLDR, PER DEGREE, (BODY AXIS)

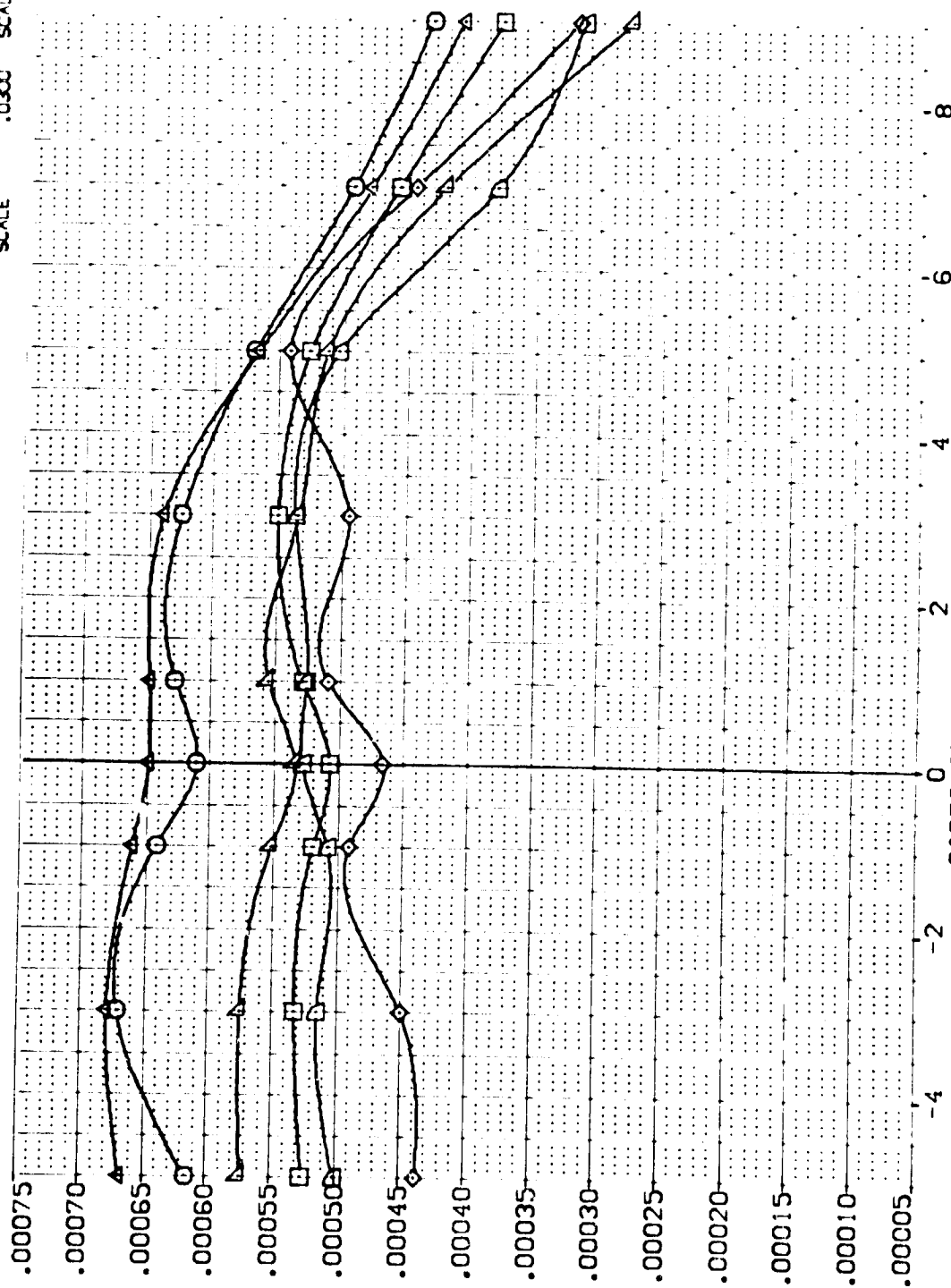


FIG. 23 RUDDER DERIVATIVES, SPEEDBRAKE 55 DEGREES

(B)MACH = .80

DATA SET SYMBOL CONFIGURATION DESCRIPTION: REFERENCE INFORMATION: SCALE

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	REF	INFO	SCALE
[VE1005]	ARC -747 B453A B C H F V I V	SPREF	2.4210	SC.F.T.
[VE1036]	ARC -747 B453A B C H F V I V	BREF	14.2440	
[VE1037]	ARC -747 B453A B C H F V I V	BREF	28.1004	
[VE1051]	ARC -747 B453A B C H F V I V	BREF	32.3000	
[VE1052]	ARC -747 B453A B C H F V I V	BREF	32.3000	
[VE1053]	ARC -747 B453A B C H F V I V	BREF	32.3000	
[VE1054]	ARC -747 B453A B C H F V I V	BREF	32.3000	
[VE1055]	ARC -747 B453A B C H F V I V	BREF	32.3000	
[VE1056]	ARC -747 B453A B C H F V I V	BREF	32.3000	
[VE1057]	ARC -747 B453A B C H F V I V	BREF	32.3000	
[VE1058]	ARC -747 B453A B C H F V I V	BREF	32.3000	
[VE1059]	ARC -747 B453A B C H F V I V	BREF	32.3000	
[VE1060]	ARC -747 B453A B C H F V I V	BREF	32.3000	
[VE1061]	ARC -747 B453A B C H F V I V	BREF	32.3000	
[VE1062]	ARC -747 B453A B C H F V I V	BREF	32.3000	
[VE1063]	ARC -747 B453A B C H F V I V	BREF	32.3000	
[VE1064]	ARC -747 B453A B C H F V I V	BREF	32.3000	
[VE1065]	ARC -747 B453A B C H F V I V	BREF	32.3000	
[VE1066]	ARC -747 B453A B C H F V I V	BREF	32.3000	
[VE1067]	ARC -747 B453A B C H F V I V	BREF	32.3000	
[VE1068]	ARC -747 B453A B C H F V I V	BREF	32.3000	
[VE1069]	ARC -747 B453A B C H F V I V	BREF	32.3000	
[VE1070]	ARC -747 B453A B C H F V I V	BREF	32.3000	
[VE1071]	ARC -747 B453A B C H F V I V	BREF	32.3000	
[VE1072]	ARC -747 B453A B C H F V I V	BREF	32.3000	
[VE1073]	ARC -747 B453A B C H F V I V	BREF	32.3000	
[VE1074]	ARC -747 B453A B C H F V I V	BREF	32.3000	
[VE1075]	ARC -747 B453A B C H F V I V	BREF	32.3000	
[VE1076]	ARC -747 B453A B C H F V I V	BREF	32.3000	
[VE1077]	ARC -747 B453A B C H F V I V	BREF	32.3000	
[VE1078]	ARC -747 B453A B C H F V I V	BREF	32.3000	
[VE1079]	ARC -747 B453A B C H F V I V	BREF	32.3000	
[VE1080]	ARC -747 B453A B C H F V I V	BREF	32.3000	
[VE1081]	ARC -747 B453A B C H F V I V	BREF	32.3000	
[VE1082]	ARC -747 B453A B C H F V I V	BREF	32.3000	
[VE1083]	ARC -747 B453A B C H F V I V	BREF	32.3000	
[VE1084]	ARC -747 B453A B C H F V I V	BREF	32.3000	
[VE1085]	ARC -747 B453A B C H F V I V	BREF	32.3000	
[VE1086]	ARC -747 B453A B C H F V I V	BREF	32.3000	
[VE1087]	ARC -747 B453A B C H F V I V	BREF	32.3000	
[VE1088]	ARC -747 B453A B C H F V I V	BREF	32.3000	
[VE1089]	ARC -747 B453A B C H F V I V	BREF	32.3000	
[VE1090]	ARC -747 B453A B C H F V I V	BREF	32.3000	
[VE1091]	ARC -747 B453A B C H F V I V	BREF	32.3000	
[VE1092]	ARC -747 B453A B C H F V I V	BREF	32.3000	
[VE1093]	ARC -747 B453A B C H F V I V	BREF	32.3000	
[VE1094]	ARC -747 B453A B C H F V I V	BREF	32.3000	
[VE1095]	ARC -747 B453A B C H F V I V	BREF	32.3000	
[VE1096]	ARC -747 B453A B C H F V I V	BREF	32.3000	
[VE1097]	ARC -747 B453A B C H F V I V	BREF	32.3000	
[VE1098]	ARC -747 B453A B C H F V I V	BREF	32.3000	
[VE1099]	ARC -747 B453A B C H F V I V	BREF	32.3000	
[VE1100]	ARC -747 B453A B C H F V I V	BREF	32.3000	

ROLLING MOMENT DUE TO RUDDER, DCBLDR, PER DEGREE, (BODY AXIS)

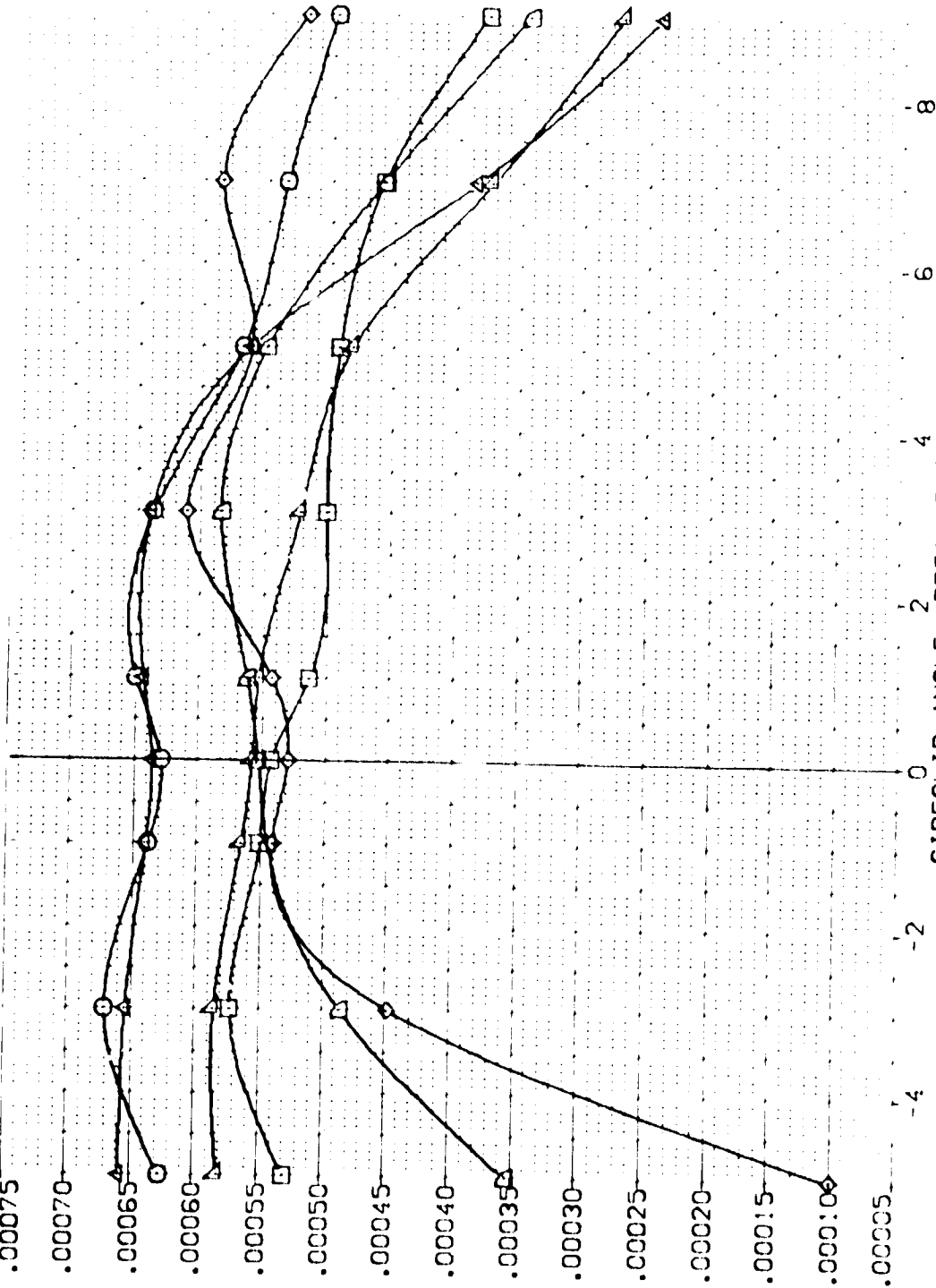


FIG. 23 RUDDER DERIVATIVES, SPEEDBRAKE 55 DEGREES

(COMAC) = .90



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NOT	RV/L	ALPHA	DR	BD/LAP	SPOBRK	REFERENCE INFORMATION
(VEJ035)	ARC 11-747 OA53A B C M F V	V	RV/L	.000	-10.000	-11.700	55.000	SREF 2.4210 SQ.FT.
(VEJ036)	ARC 11-747 OA53A B C M F V	V	RV/L	10.000	-10.000	-11.700	55.000	LREF 14.2440 IN.
(VEJ037)	ARC 11-747 OA53A B C M F V	V	RV/L	20.000	-10.000	-11.700	55.000	BREF 28.1004 IN.
(VEJ051)	ARC 11-747 OA53A B C M F V	V	RV/L	.000	-25.000	-11.700	55.000	XMT 32.3010 IN.
(VEJ052)	ARC 11-747 OA53A B C M F V	V	RV/L	10.000	-25.000	-11.700	55.000	YMRP 11.2500 IN.
(VEJ053)	ARC 11-747 OA53A B C M F V	V	RV/L	20.000	-25.000	-11.700	55.000	ZMRP .0300 SCALE

ROLLING MOMENT DUE TO RUDDER, DCBLDR, PER DEGREE, (BODY AXIS)

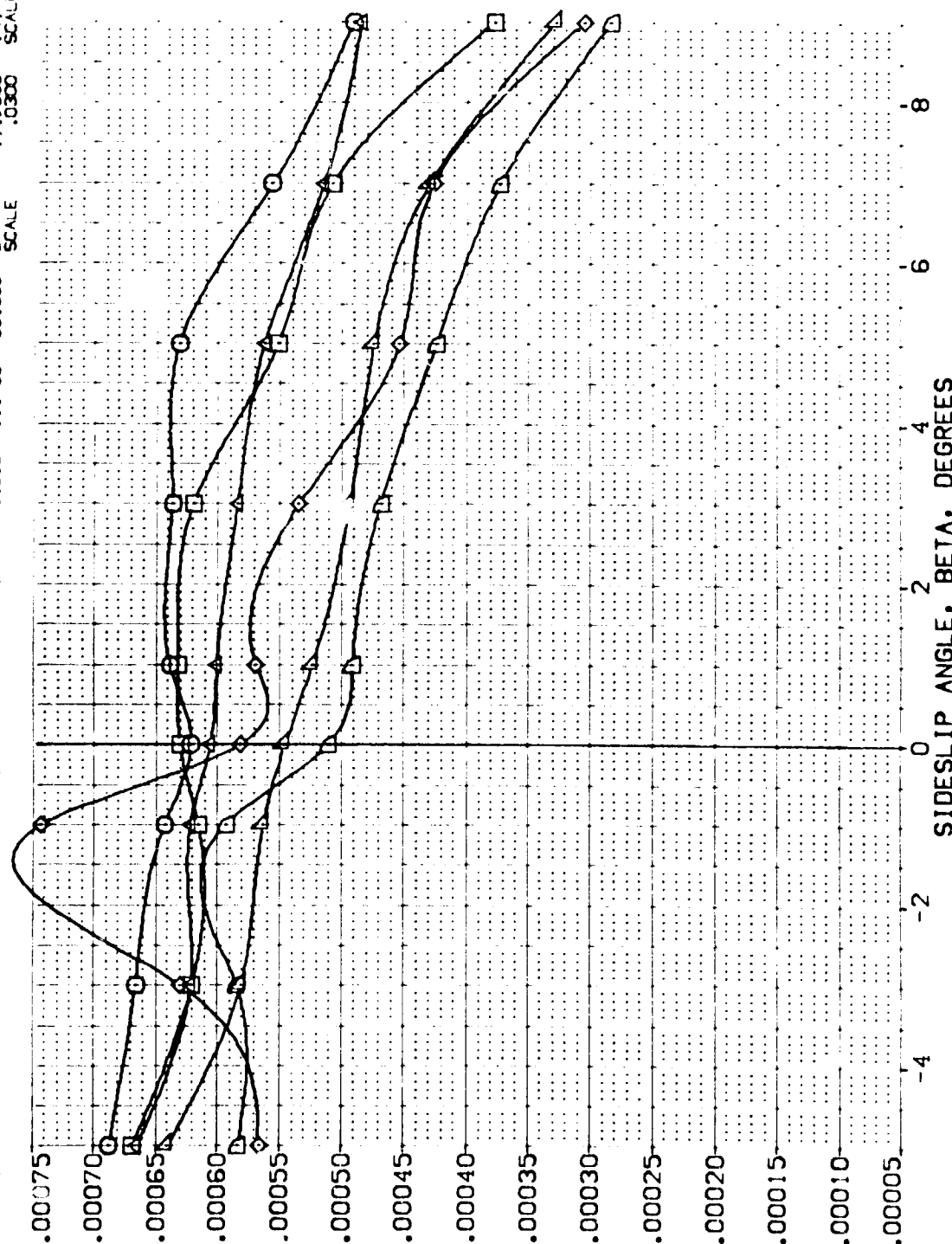


FIG. 23 RUDDER DERIVATIVES, SPEEDBRAKE 55 DEGREES

(O)MAC = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NO.:	RV/L	ALPHA	DR	BOFLAP	SPEEDBRK	REFERENCE INFORMATION
{VEJ035}	ARC 11-747 DA53A B C M F V	V	RV/L	.000	-10.000	-11.700	55.000	SREF 2.4210 SQ.FT.
{VEJ036}	ARC 11-747 DA53A B C M F V	V	RV/L	10.000	-10.000	-11.700	55.000	LREF 14.2440 IN.
{VEJ037}	ARC 11-747 DA53A B C M F V	V	RV/L	20.000	-10.000	-11.700	55.000	BREF 28.1004 IN.
{VEJ051}	ARC 11-747 DA53A B C M F V	V	RV/L	.000	-25.000	-11.700	55.000	XMRP 32.3010 IN.
{VEJ052}	ARC 11-747 DA53A B C M F V	V	RV/L	10.000	-25.000	-11.700	55.000	YMRP 0.0000 IN.
{VEJ053}	ARC 11-747 DA53A B C M F V	V	RV/L	20.000	-25.000	-11.700	55.000	ZMRP 11.7500 IN.
							SCALE	.0300 SCALE

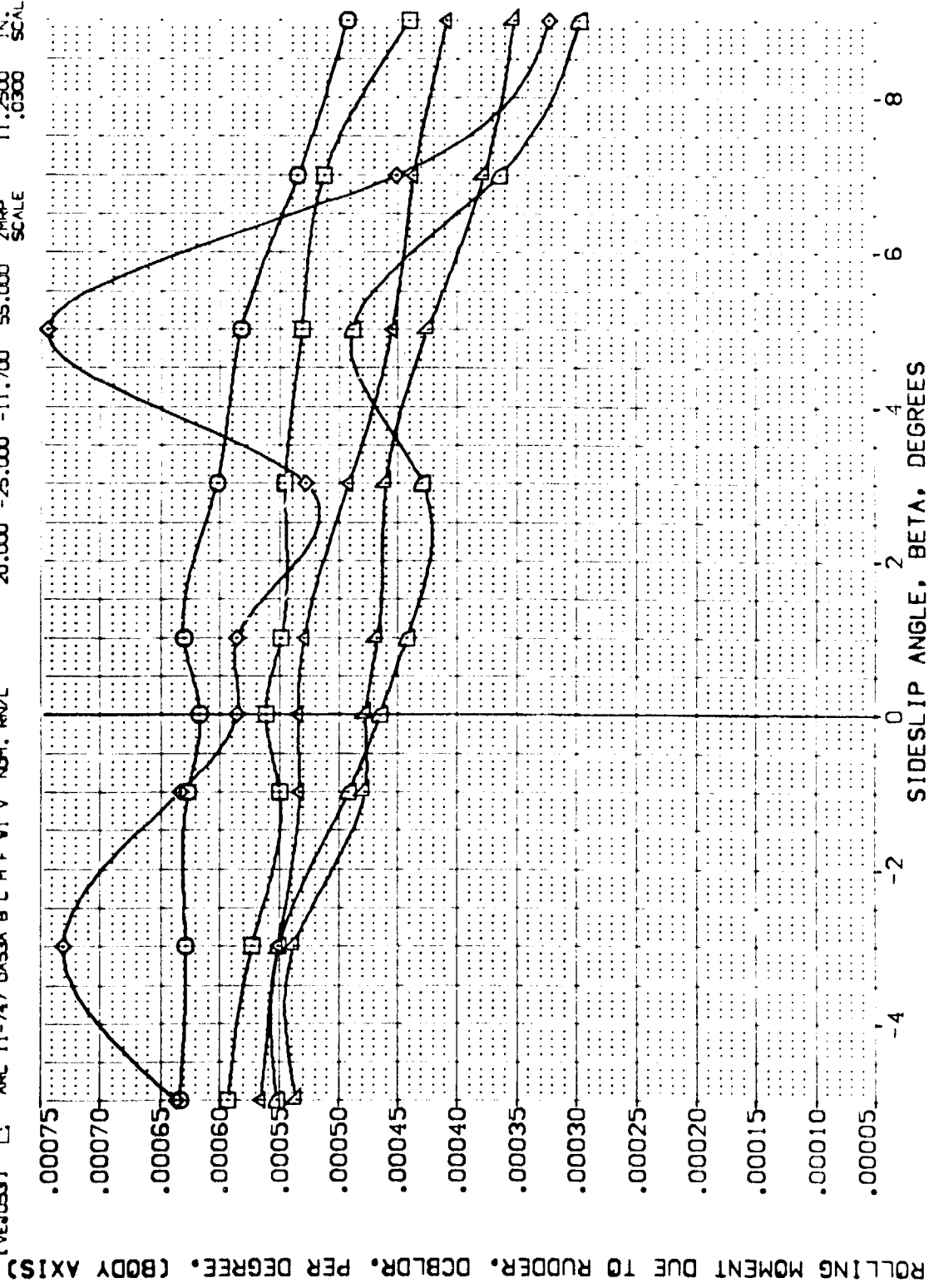


FIG. 23 RUDDER DERIVATIVES, SPEEDBRAKE 55 DEGREES

(CJMAC) = 1.20

PITCHING MOMENT COEFF. DERIV. WRT RUDDER DEFL., DCLMDR, PER DEG

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	DR	BD FLAP	SPOBRK	REFERENCE INFORMATION
[VEJ035]	ARC 11-747 DAS3A B C H F V	0.000	-10.000	-11.700	55.000	SREF 2.4210 SQ.FT.
[VEJ036]	ARC 11-747 DAS3A B C H F V	10.000	-10.000	-11.700	55.000	LREF 14.2440
[VEJ037]	ARC 11-747 DAS3A B C H F V	20.000	-10.000	-11.700	55.000	BREF 28.1004
[VEJ051]	ARC 11-747 DAS3A B C H F V	10.000	-25.000	-11.700	55.000	YMRP 32.3010
[VEJ052]	ARC 11-747 DAS3A B C H F V	20.000	-25.000	-11.700	55.000	ZMRP .0000
[VEJ053]	ARC 11-747 DAS3A B C H F V	20.000	-25.000	-11.700	55.000	SCALE 11.2500

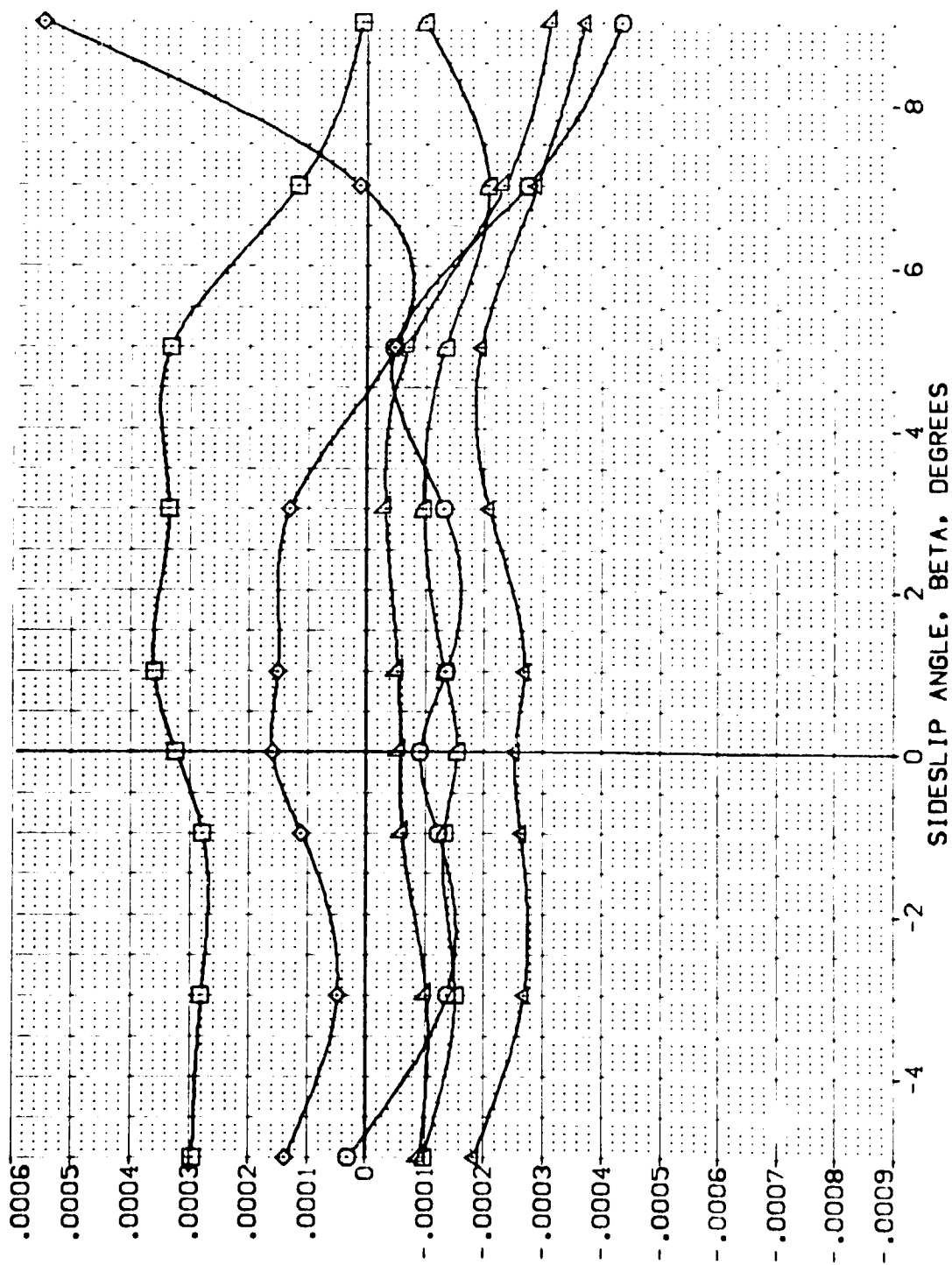


FIG. 23 RUDDER DERIVATIVES, SPEEDBRAKE 55 DEGREES

(A)MAC = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	DR	BOFLAP	SPOBRK	REFERENCE INFORMATION
[VEJ005]	ARC 11-747 B453A B C H F V	0.000	-10.000	-11.700	55.000	SREF 2.4210 SQ.FT.
[VEJ006]	ARC 11-747 B453A B C H F V	10.000	-10.000	-11.700	55.000	BRF 14.2440
[VEJ007]	ARC 11-747 B453A B C H F V	20.000	-10.000	-11.700	55.000	BRF 28.1004
[VEJ051]	ARC 11-747 B453A B C H F V	10.000	-20.000	-11.700	55.000	YREF 37.3010
[VEJ052]	ARC 11-747 B453A B C H F V	10.000	-20.000	-11.700	55.000	YREF 11.2000
[VEJ053]	ARC 11-747 B453A B C H F V	20.000	-20.000	-11.700	55.000	YREF 11.2000
						SCALE .0300

PITCHING MOMENT COEFF. DERIV. WRT RUDDER DEFL., DCLMDR, PER DEG

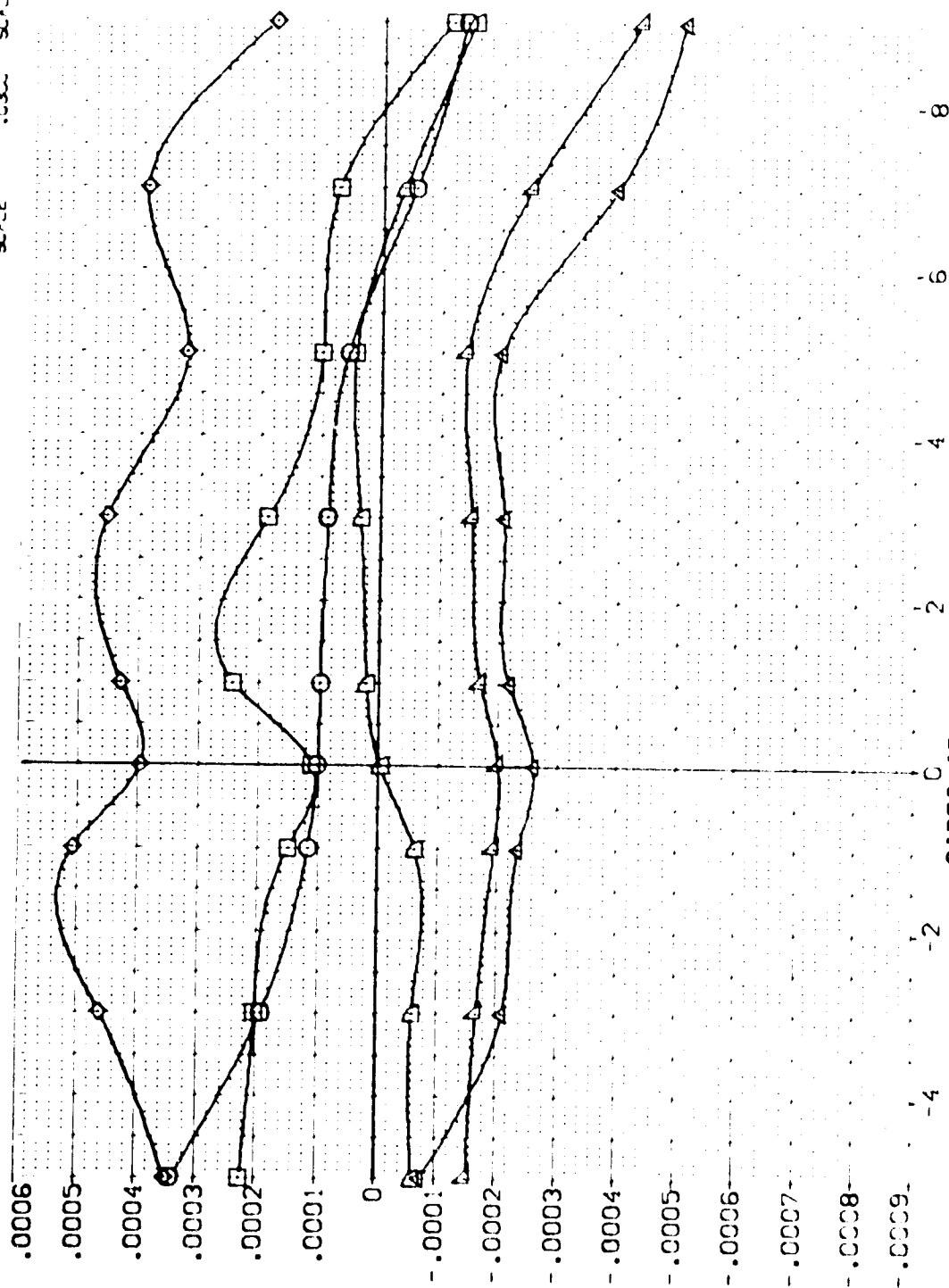


FIG. 23 RUDDER DERIVATIVES, SPEEDBRAKE 55 DEGREES

CBMAC = .80

DATA SET SYMBOL CONFIGURATION DESCRIPTION

[VEJ035]	ARC	-747	DA53A	B	C	H	F	VI	V	RV/L	ALPHA	DR	BOFLAP	SPEEDBRAK	REFERENCE INFORMATION
[VEJ036]	ARC	-747	DA53A	B	C	H	F	VI	V	RV/L	0.000	-10.000	-11.700	55.000	SREF 2.4210 50.FT.
[VEJ037]	ARC	-747	DA53A	B	C	H	F	VI	V	RV/L	10.000	-10.000	-11.700	55.000	LREF 14.2440
[VEJ038]	ARC	-747	DA53A	B	C	H	F	VI	V	RV/L	20.000	-10.000	-11.700	55.000	BREF 28.1004
[VEJ039]	ARC	-747	DA53A	B	C	H	F	VI	V	RV/L	10.000	-25.000	-11.700	55.000	AMRP 32.3010
[VEJ040]	ARC	-747	DA53A	B	C	H	F	VI	V	RV/L	10.000	-25.000	-11.700	55.000	VMRP 11.0000
[VEJ041]	ARC	-747	DA53A	B	C	H	F	VI	V	RV/L	20.000	-25.000	-11.700	55.000	ZMRP 11.2500
															SCALE .0300

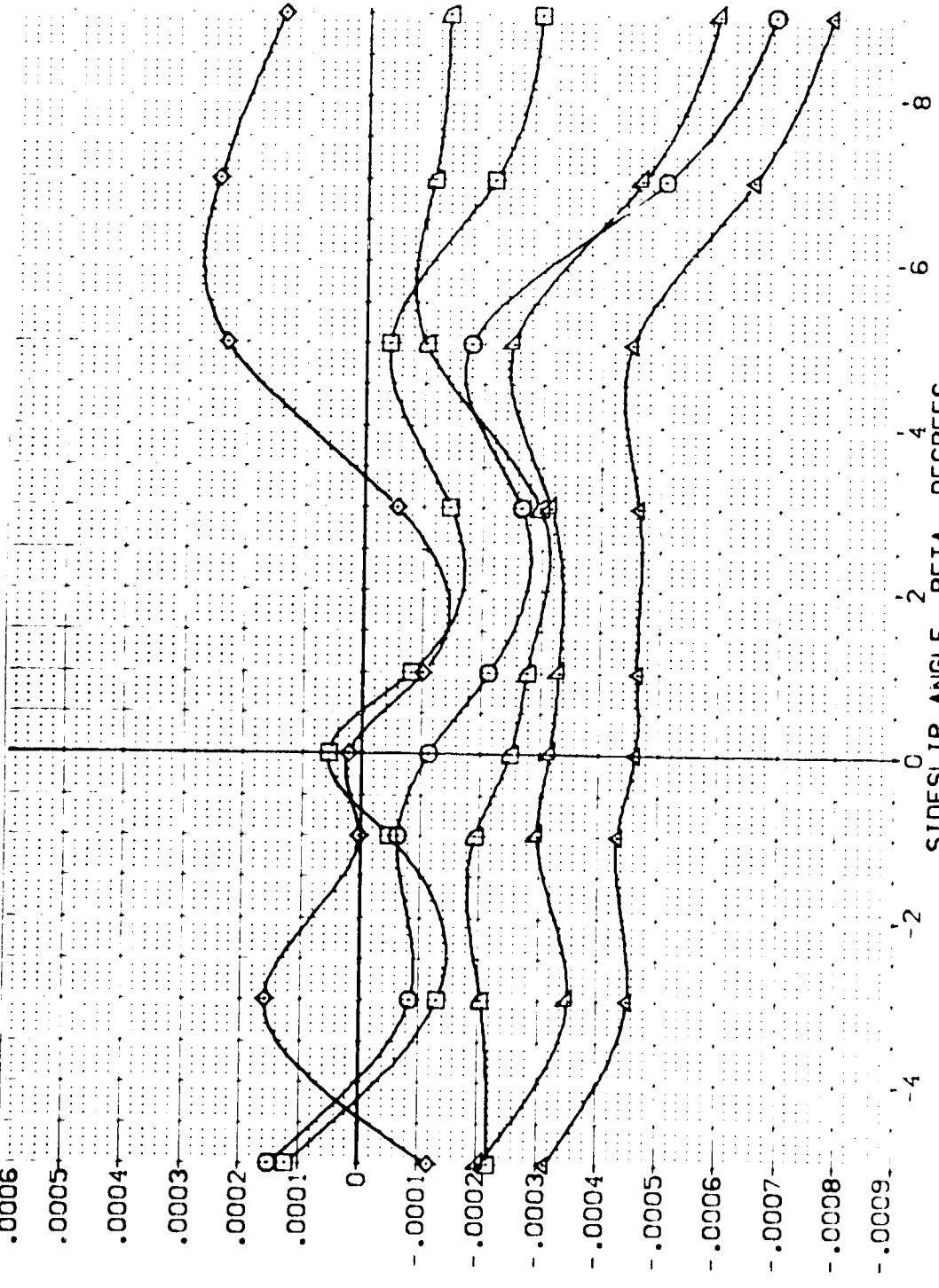


FIG. 23 RUDDER DERIVATIVES, SPEEDBRAKE 55 DEGREES

(C)MAC = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	A' PVA	DR	BD FLAP	SPOBRK	REFERENCE INFORMATION
(VEJ035)	ARC    -747 D453A B C M F V I V	0.000	-10.000	-11.700	55.000	SREF 2.4210 SQ. FT.
(VEJ036)	ARC    -747 D453A B C M F V I V	10.000	-10.000	-11.700	55.000	REF 14.2440
(VEJ037)	ARC    -747 D453A B C M F V I V	20.000	-10.000	-11.700	55.000	REF 28.1004
(VEJ038)	ARC    -747 D453A B C M F V I V	10.000	-25.000	-11.700	55.000	REF 32.3010
(VEJ039)	ARC    -747 D453A B C M F V I V	20.000	-25.000	-11.700	55.000	REF 32.1000
(VEJ040)	ARC    -747 D453A B C M F V I V	20.000	-25.000	-11.700	55.000	REF 11.2500
						SCALE .0300

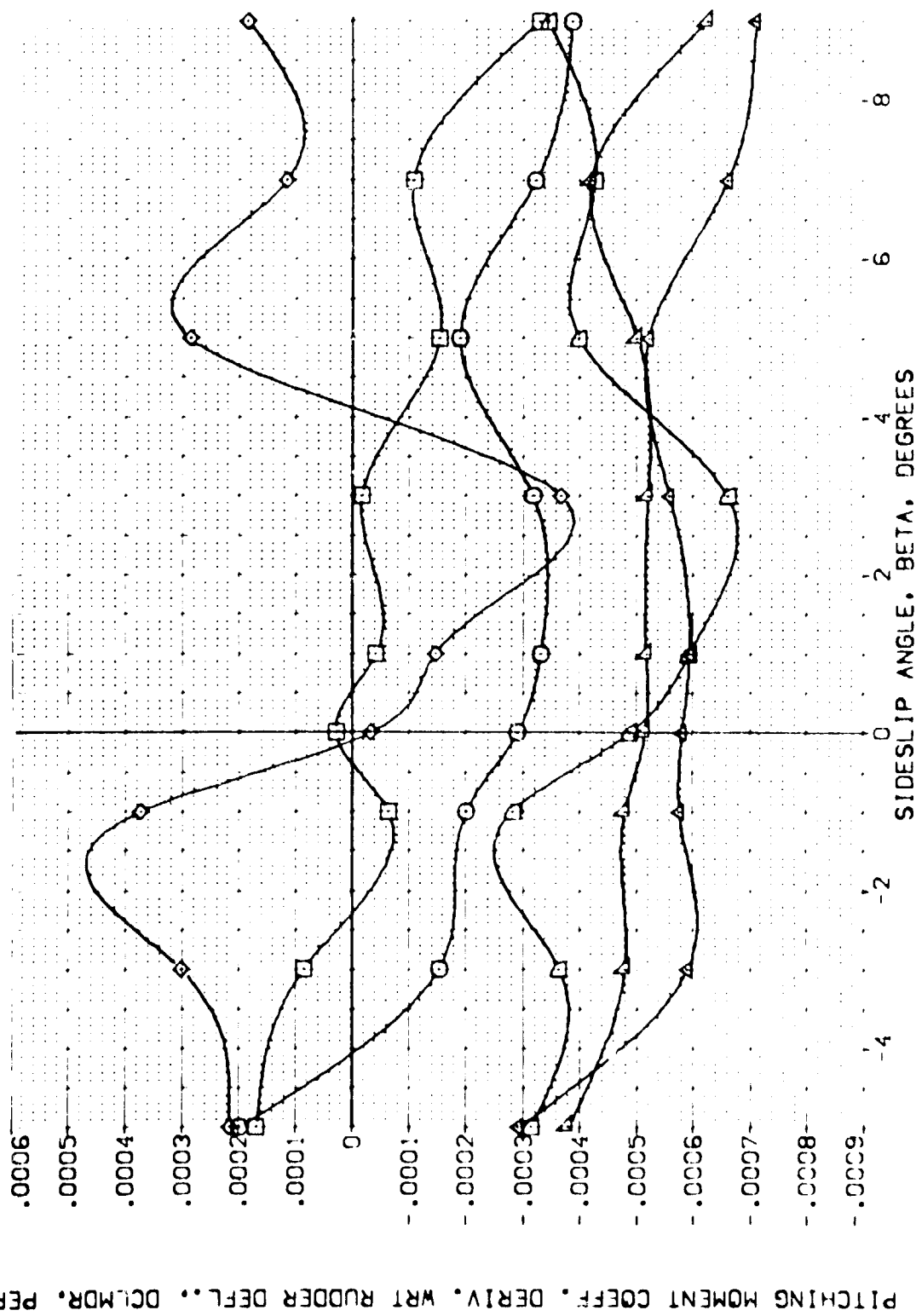


FIG. 23 RUDDER DERIVATIVES, SPEEDBRAKE 55 DEGREES

(C)MAC = 1.05

PITCHING MOMENT COEFF. DERIV. WRT RUDDER DEFL., DCLMDR, PER DEG

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	DR	BDF LAP	SPDRBK	REFERENCE INFORMATION
[VEJ035]	ARC 11-747 DA53A B C M F V1	0.000	-10.000	-11.700	55.000	SREF 2.4210 SQ.FT.
[VEJ036]	ARC 11-747 DA53A B C M F V1	10.000	-10.000	-11.700	55.000	LREF 14.2440
[VEJ037]	ARC 11-747 DA53A B C M F V1	20.000	-10.000	-11.700	55.000	BREF 28.1204
[VEJ051]	ARC 11-747 DA53A B C M F V1	10.000	-25.000	-11.700	55.000	AMRP 37.3010
[VEJ052]	ARC 11-747 DA53A B C M F V1	10.000	-25.000	-11.700	55.000	VMRP 1.0000
[VEJ053]	ARC 11-747 DA53A B C M F V1	20.000	-25.000	-11.700	55.000	ZMRP 1.2500
						SCALE 0.0000

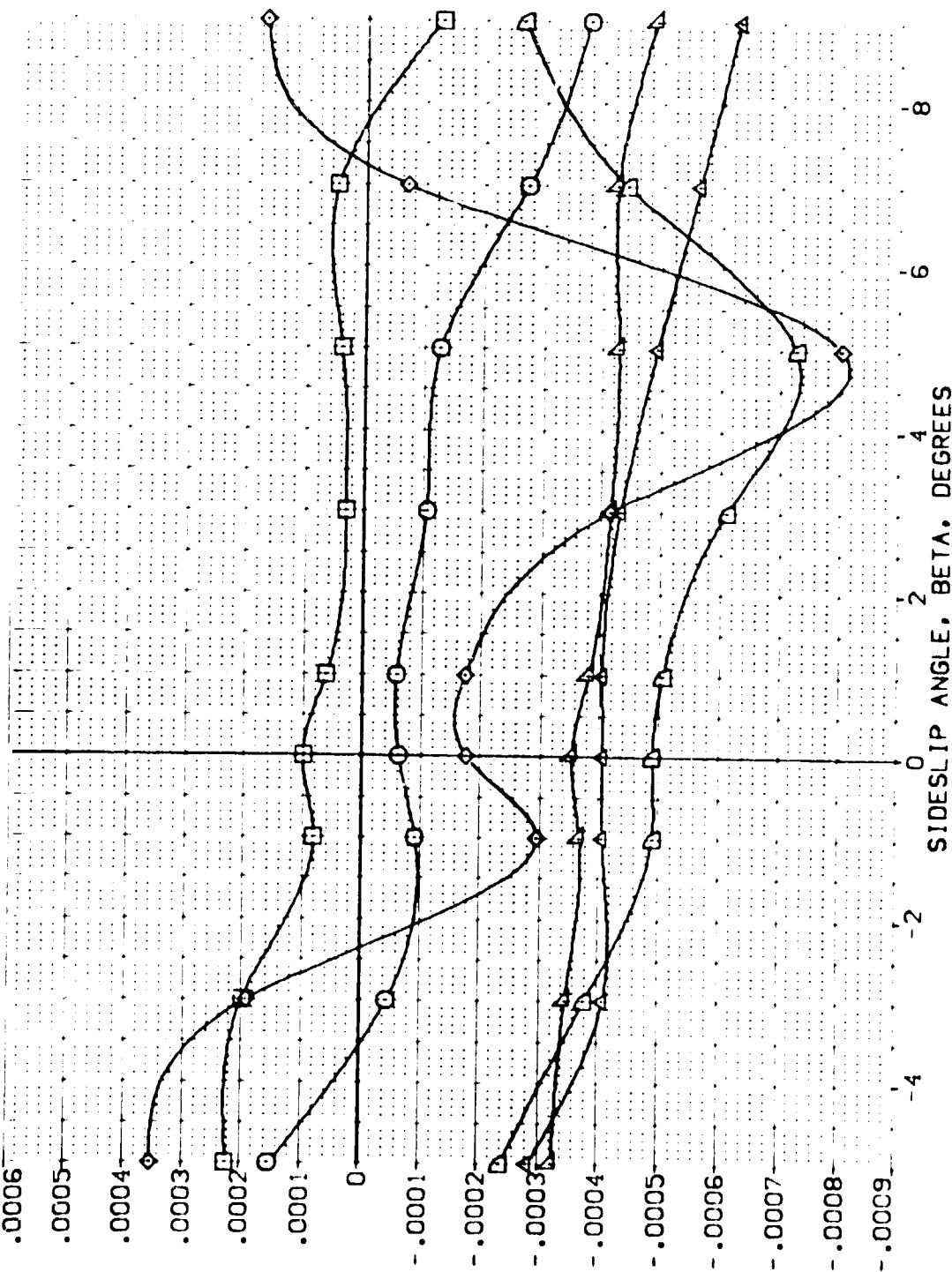


FIG. 23 RUDDER DERIVATIVES, SPEEDBRAKE 55 DEGREES

(E)MAC = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	DR	BDCLAP	SPEEDBRK	REFERENCE INFORMATION
(VEJ045)	ARC 11-747 BAS3A B C H F VI V	0.000	-10.000	-11.700	85.000	SREF 2.4210 50. FT.
(VEJ047)	ARC 11-747 BAS3A B C H F VI V	10.000	-10.000	-11.700	85.000	LREF 14.2440
(VEJ048)	ARC 11-747 BAS3A B C H F VI V	20.000	-10.000	-11.700	85.000	BREF 28.1004
						XMRP 32.3010
						YMRP .0000
						ZMRP 11.2500
						SCALE .0300

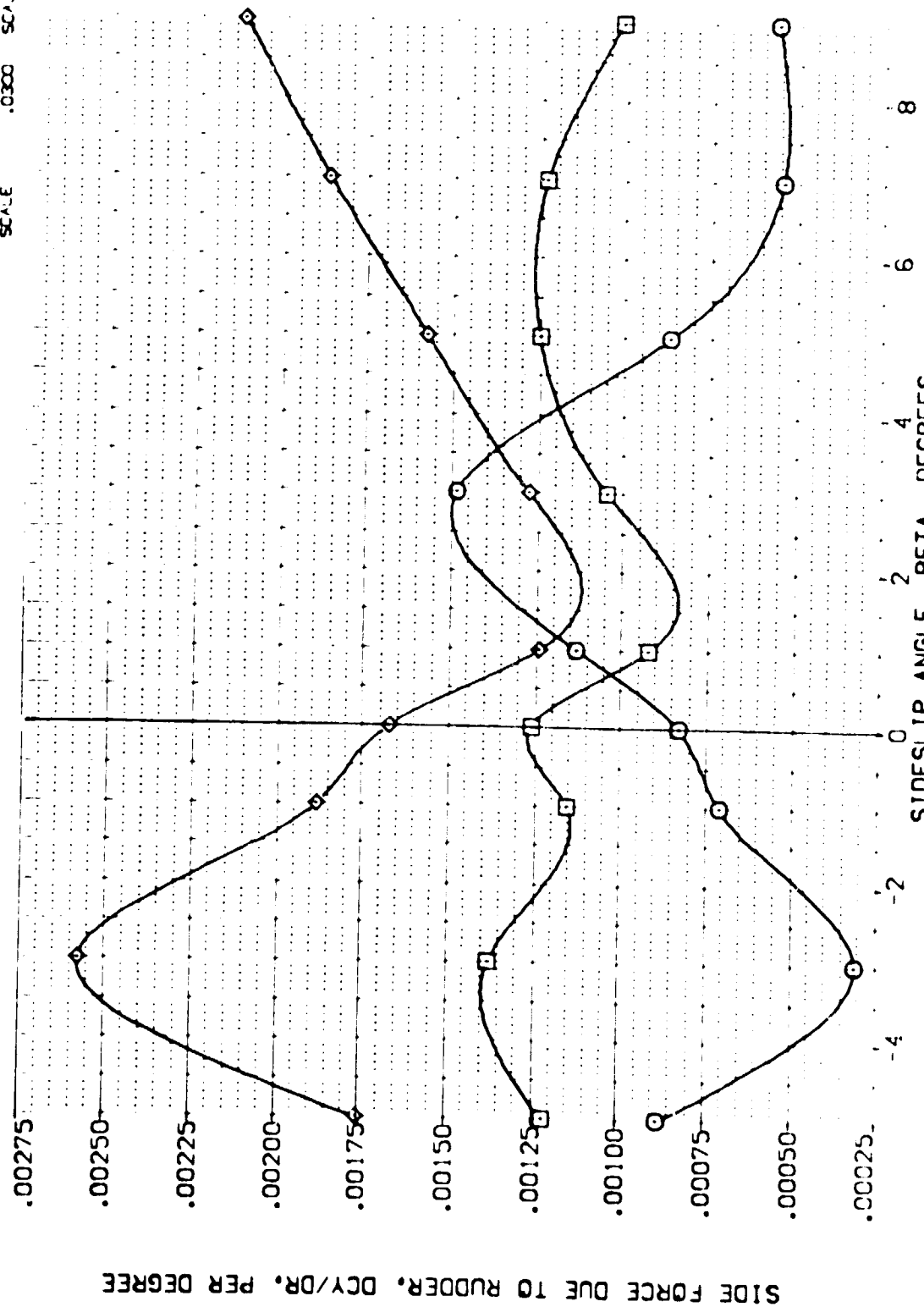


FIG. 24 RUDDER DERIVATIVES, SPEEDBRAKE 85 DEGREES

(A)MAC = .60



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	DR	BDF LAP	SPEED BRK	REFERENCE INFORMATION
(VEJ045)	ARC 11-747 0A53A B C M F VI V	0.000	-10.000	-11.700	85.000	SREF 2.4210 SQ.FT.
(VEJ047)	ARC 11-747 0A53A B C M F VI V	10.000	-10.000	-11.700	85.000	LREF 14.2440
(VEJ048)	ARC 11-747 0A53A B C M F VI V	20.000	-10.000	-11.700	85.000	BREF 28.1004
						XMRP 32.3010
						YMRP 11.0000
						ZMRP 11.7500
						SCALE 1.0300

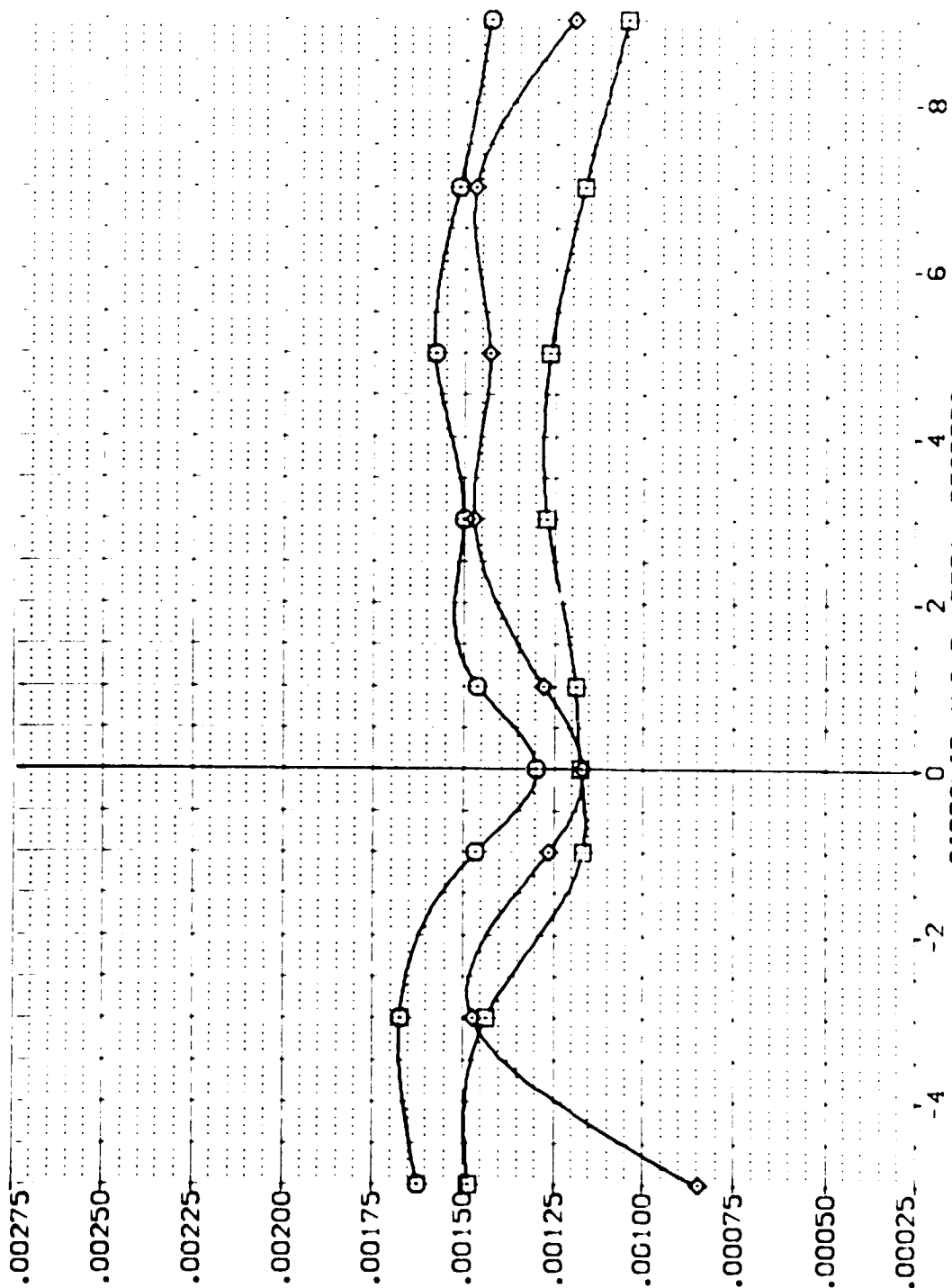


FIG. 24 RUDDER DERIVATIVES, SPEEDBRAKE 85 DEGREES

(B)MAC = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	DR	BD FLAP	SPEED	REFERENCE INFORMATION
(VEJ046)	ARC 11-747 D453A B C H F VI V	0.000	-10.000	-11.700	85.000	SREF 2.4210 SQ.FT.
(VEJ047)	ARC 11-747 D453A B C H F VI V	10.000	-10.000	-11.700	85.000	LREF 14.2440
(VEJ048)	ARC 11-747 D453A B C H F VI V	20.000	-10.000	-11.700	85.000	BREF 28.1004
						XMRD 32.3010
						YMRD 11.2500
						ZMRD 0.0300
						SCALE

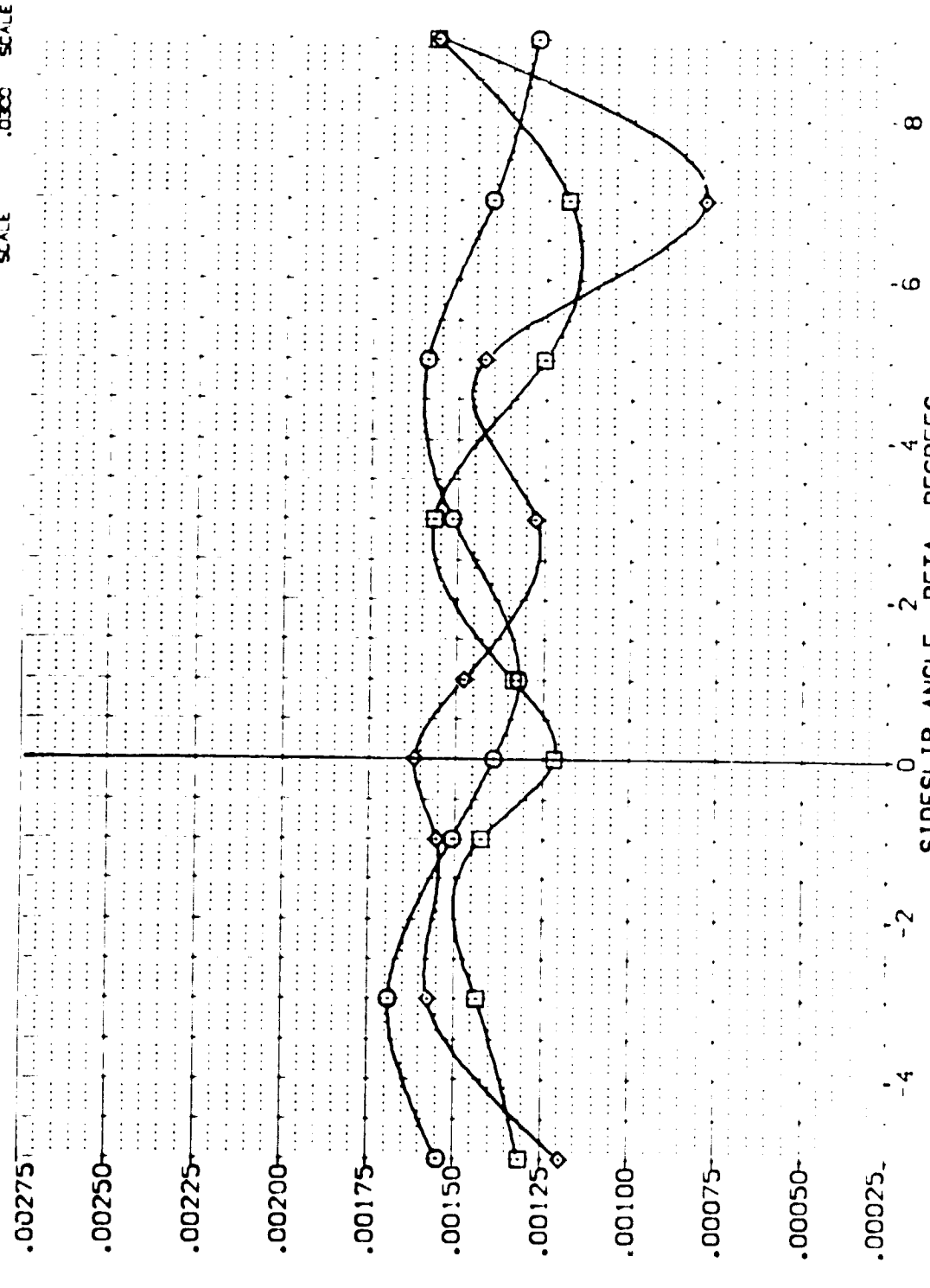


FIG. 24 RUDDER DERIVATIVES, SPEEDBRAKE 85 DEGREES

(C)MAC = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	DR	BOFLAP	SPOBIX	REFERENCE INFORMATION
{VEJ046}	ARC 11-747 0A53A B C H F VI V	0.000	-10.000	-11.700	85.070	SREF 2.4210 SQ.FT.
{VEJ047}	ARC 11-747 0A53A B C H F VI V	10.000	-10.000	-11.700	85.070	LREF 14.2440
{VEJ048}	ARC 11-747 0A53A B C H F VI V	20.000	-10.000	-11.700	85.070	BREF 28.1004
						XREF 32.3010
						YREF .0000
						ZREF 11.2500
						SCALE .0300

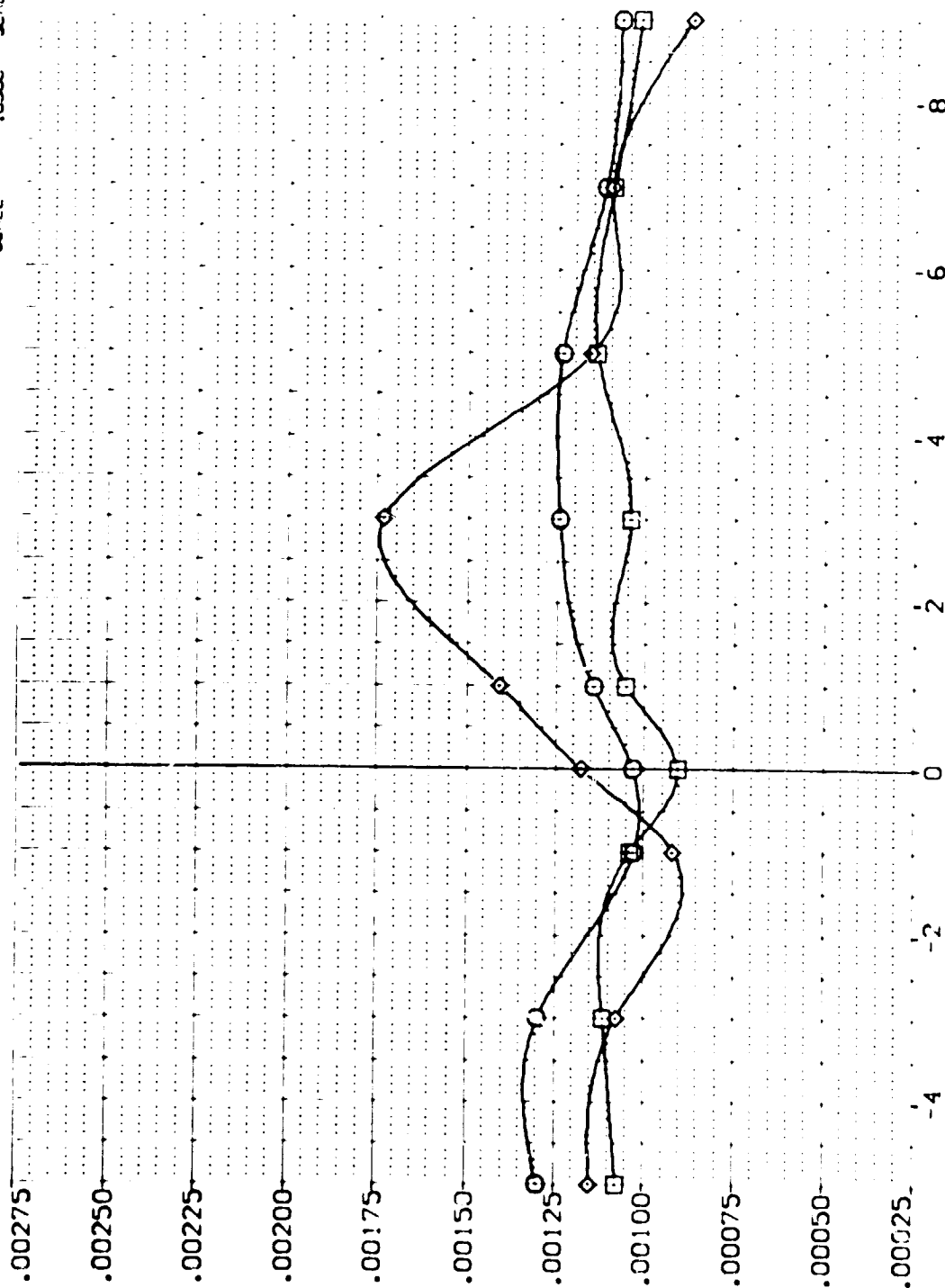


FIG. 24 RUDDER DERIVATIVES, SPEEDBRAKE 85 DEGREES

(C)MAC = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	DR	BDLAP	SPOBRK	REFERENCE INFORMATION
(VEJ046)	ARC 11-747 BA53A B C H F VI V	0.000	-10.000	-11.700	85.000	SREF 2.4210 SQ.FT.
(VEJ047)	ARC 11-747 BA53A B C H F VI V	10.000	-10.000	-11.700	85.000	LREF 14.2440 IN.
(VEJ048)	ARC 11-747 BA53A B C H F VI V	20.000	-10.000	-11.700	85.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

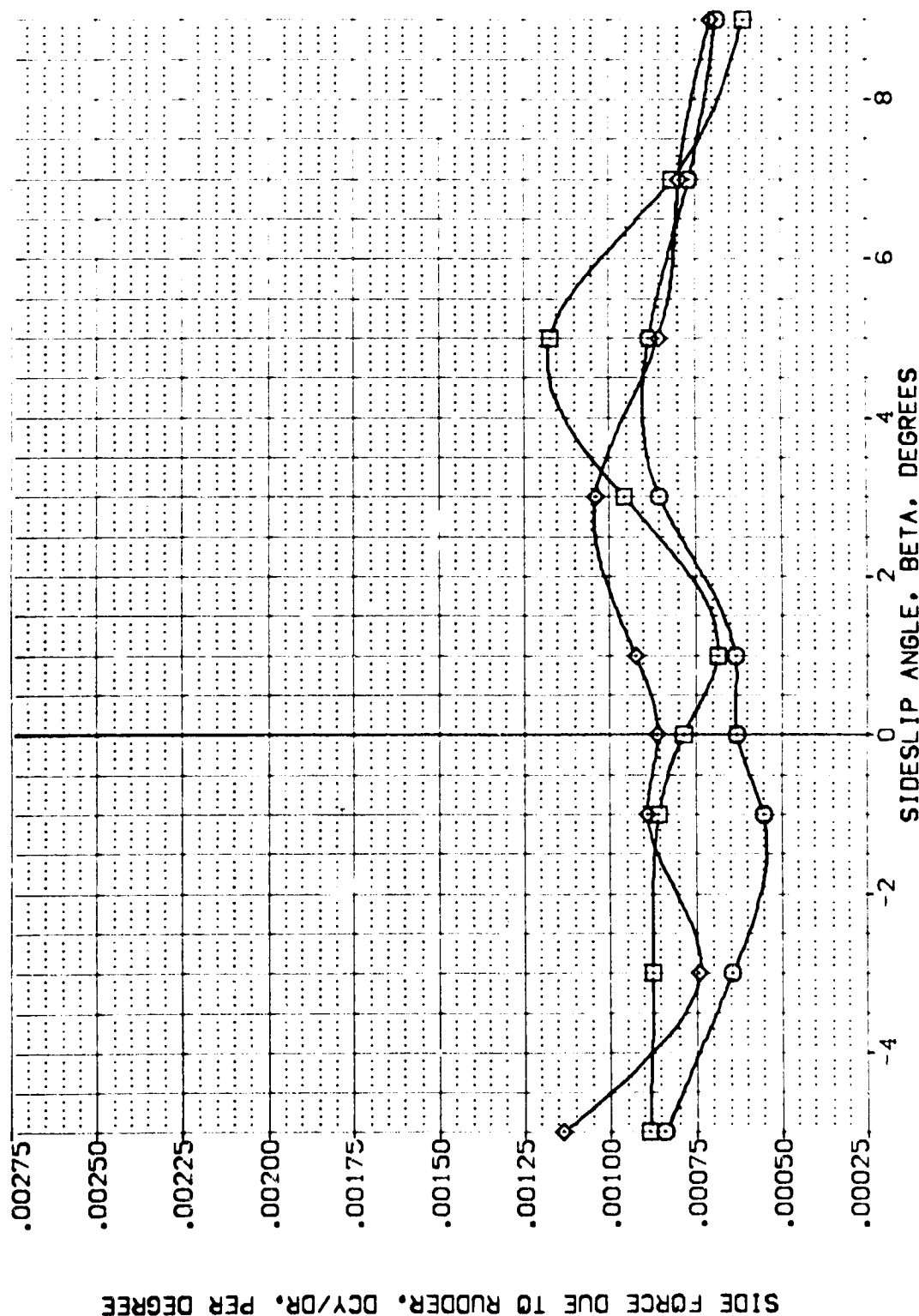


FIG. 24 RUDDER DERIVATIVES, SPEEDBRAKE 85 DEGREES

(E)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	DR	BD FLAP	SPEED	REFERENCE INFORMATION
(VEJ046)	ARC 11-747 CAS3A B C H F VI V	0.000	-10.000	-11.700	85.000	SREF 2.4210 SQ.FT.
(VEJ047)	ARC 11-747 CAS3A B C H F VI V	10.000	-10.000	-11.700	85.000	LREF 14.2440 IN.
(VEJ048)	ARC 11-747 CAS3A B C H F VI V	20.000	-10.000	-11.700	85.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP 11.2500 IN.
						ZMRP 11.2500 IN.
						SCALE .0300 SCALE

YAWING MOMENT DUE TO RUDDER, DCYNDR, PER DEGREE, (BODY AXIS)

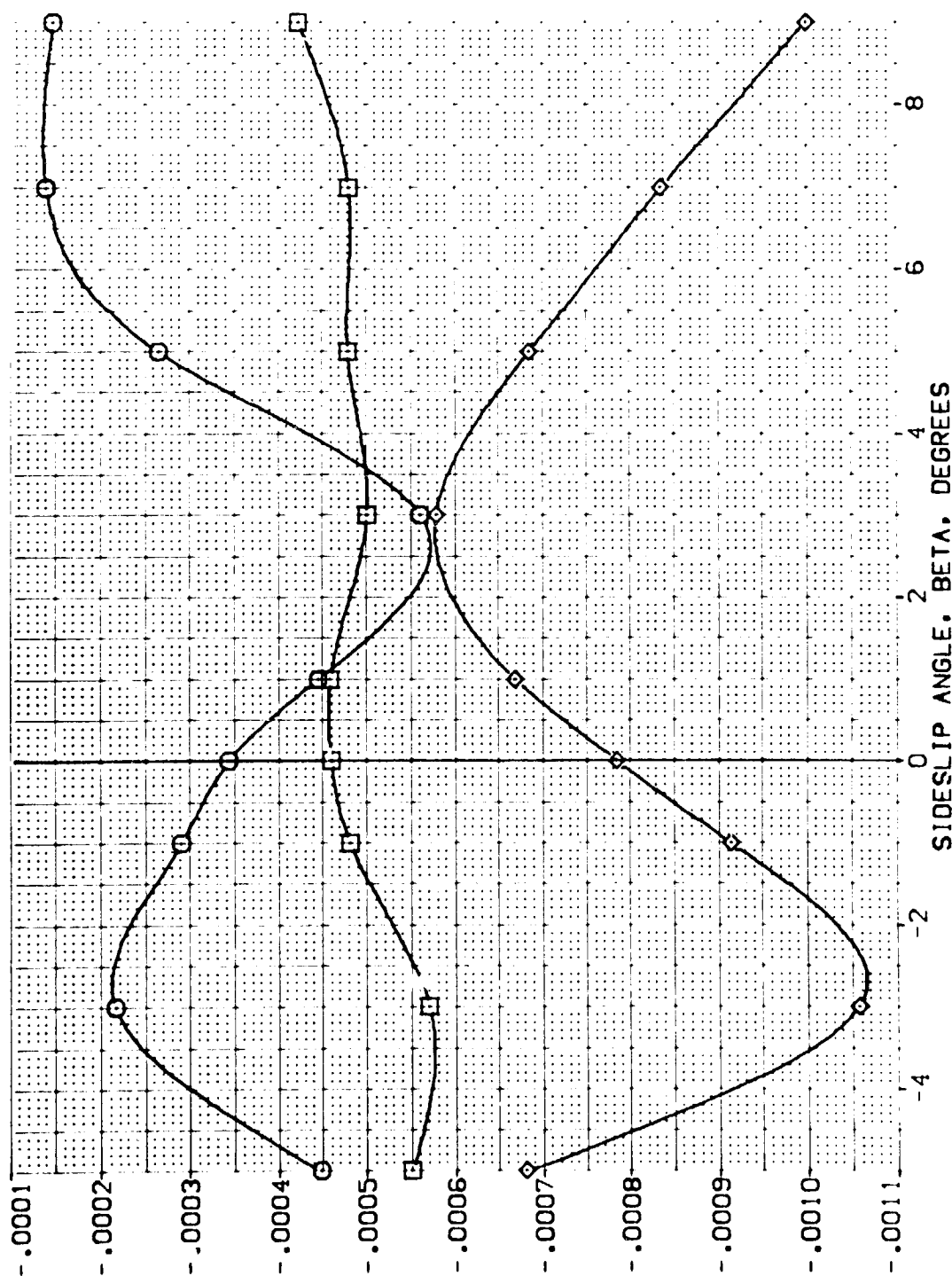


FIG. 24 RUDDER DERIVATIVES, SPEEDBRAKE 85 DEGREES

(A)MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	DR	BDFLAP	SPDBRK	REFERENCE INFORMATION
{VEJ046}	ARC 11-747 0A53A B C M F VI V	.000	-10.000	-11.700	85.000	SREF 2.4210 SQ.FT.
{VEJ047}	ARC 11-747 0A53A B C M F VI V	10.000	-10.000	-11.700	85.000	LREF 14.2140 IN.
{VEJ048}	ARC 11-747 0A53A B C M F VI V	20.000	-10.000	-11.700	85.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

YAWING MOMENT DUE TO RUDDER, DCYNDR, PER DEGREE, (BODY AXIS)

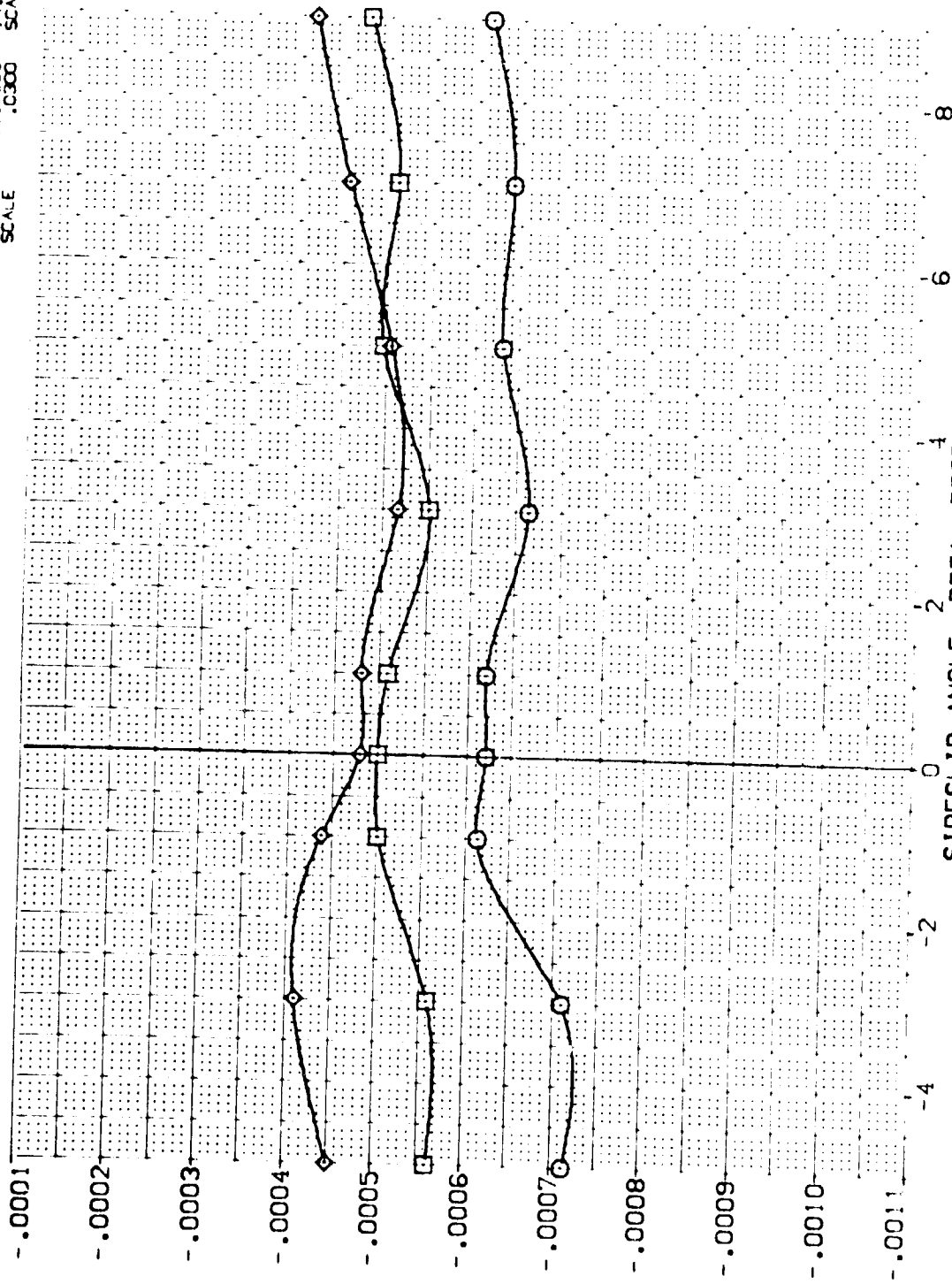


FIG. 24 RUDDER DERIVATIVES, SPEEDBRAKE 85 DEGREES

(B)MACH = .80



DATA SET SYMBOL		CONFIGURATION DESCRIPTION		ALPHA	DR	BDFLAP	SPOBRK	REFERENCE INFORMATION	
{VEJ046}	ARC 11-747	0A53A	B C M F V1	0.00	-10.000	-11.700	85.000	SREF	2.4210
{VEJ047}	ARC 11-747	0A53A	B C M F V1	10.00	-10.000	-11.700	85.000	LREF	14.2440
{VEJ048}	ARC 11-747	0A53A	B C M F V1	20.000	-10.000	-11.700	85.000	BREF	28.1004
								XMRP	32.3010
								YMRP	.0000
								ZMRP	11.2500
								SCALE	.0300

YAWING MOMENT DUE TO RUDDER, DCYNDR. PER DEGREE, (BODY AXIS)

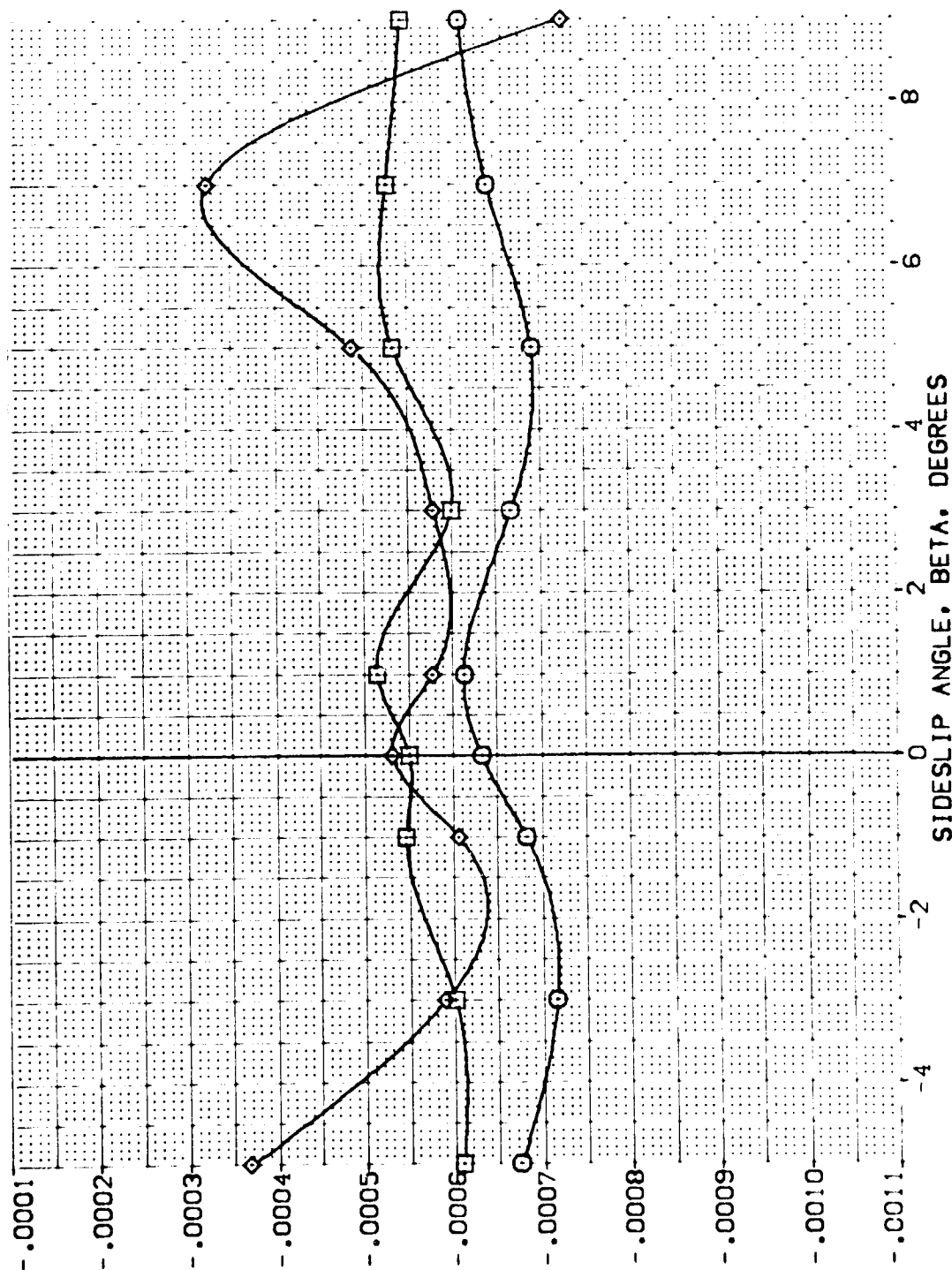


FIG. 24 RUDDER DERIVATIVES, SPEEDBRAKE 85 DEGREES

(C)MAC = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	DR	BD/LAP	SPEED	REFERENCE INFORMATION
(VEJ046)	ARC 11-747 DA53A B C M F VI V	0.000	-10.000	-11.700	85.000	SREF 2.4210 SQ.FT.
(VEJ047)	ARC 11-747 DA53A B C M F VI V	10.000	-10.000	-11.700	85.000	LREF 14.2440 IN.
(VEJ048)	ARC 11-747 DA53A B C M F VI V	20.000	-10.000	-11.700	85.000	BREF 28.1004 IN.
						YMRP 32.3010 IN.
						ZMRP 0.0000 IN.
						SCALE 11.2500 IN.
						SCALE .0300

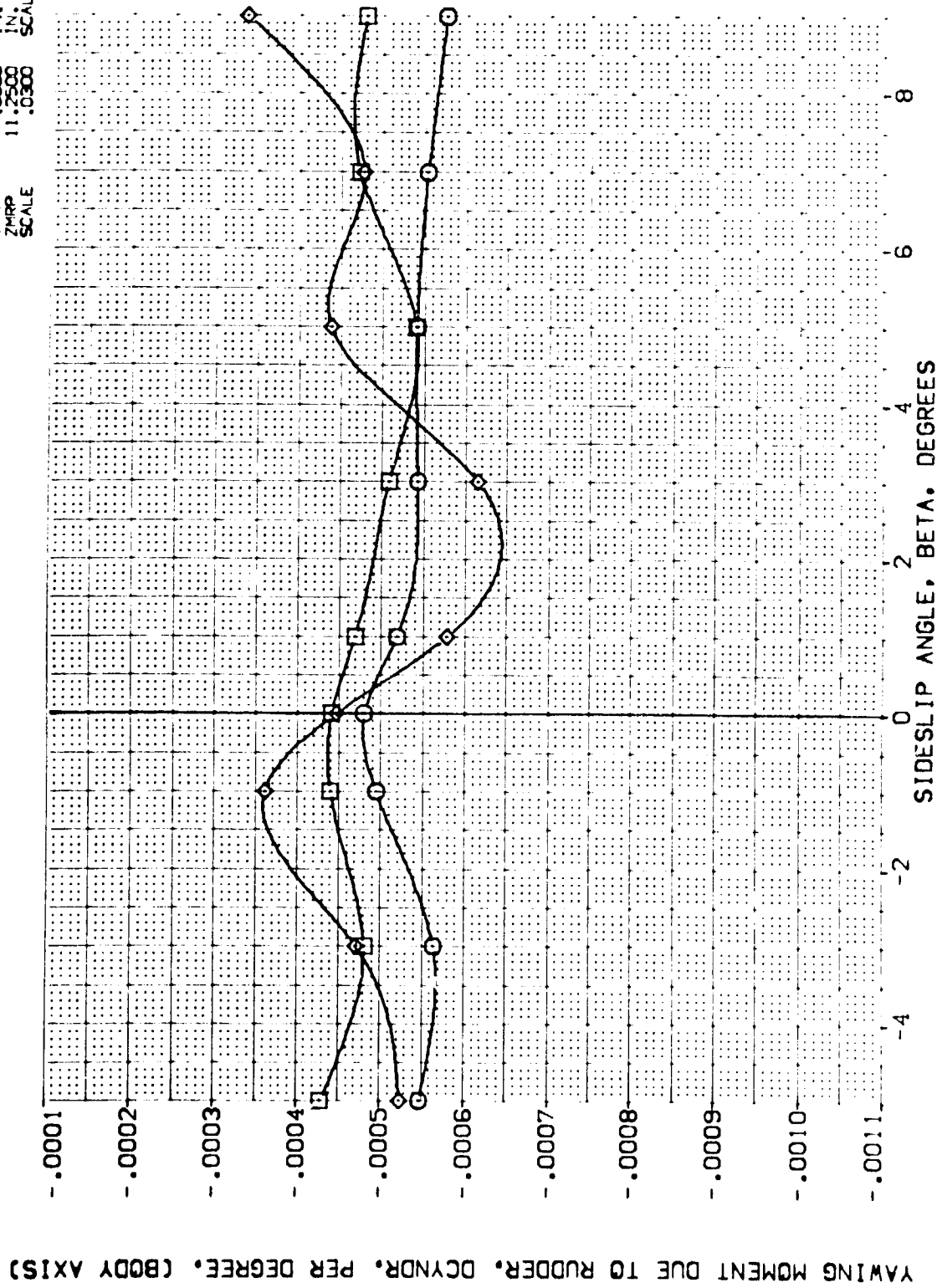


FIG. 24 RUDDER DERIVATIVES, SPEEDBRAKE 85 DEGREES

(SJMACH = 1.05



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	DR	BOFLAP	SPEEDBRAK	REFERENCE INFORMATION
(VE1045)	ARC 11-747 BA53A B C M F VI V	0.000	-10.000	-11.700	85.000	SREF 2.4210 SQ.FT.
(VE1047)	ARC 11-747 BA53A B C M F VI V	10.000	-10.000	-11.700	85.000	LREF 14.2440 IN.
(VE1048)	ARC 11-747 BA53A B C M F VI V	20.000	-10.000	-11.700	85.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP 0.0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

YAWING MOMENT DUE TO RUDDER, DCYNDR, PER DEGREE, (BODY AXIS)

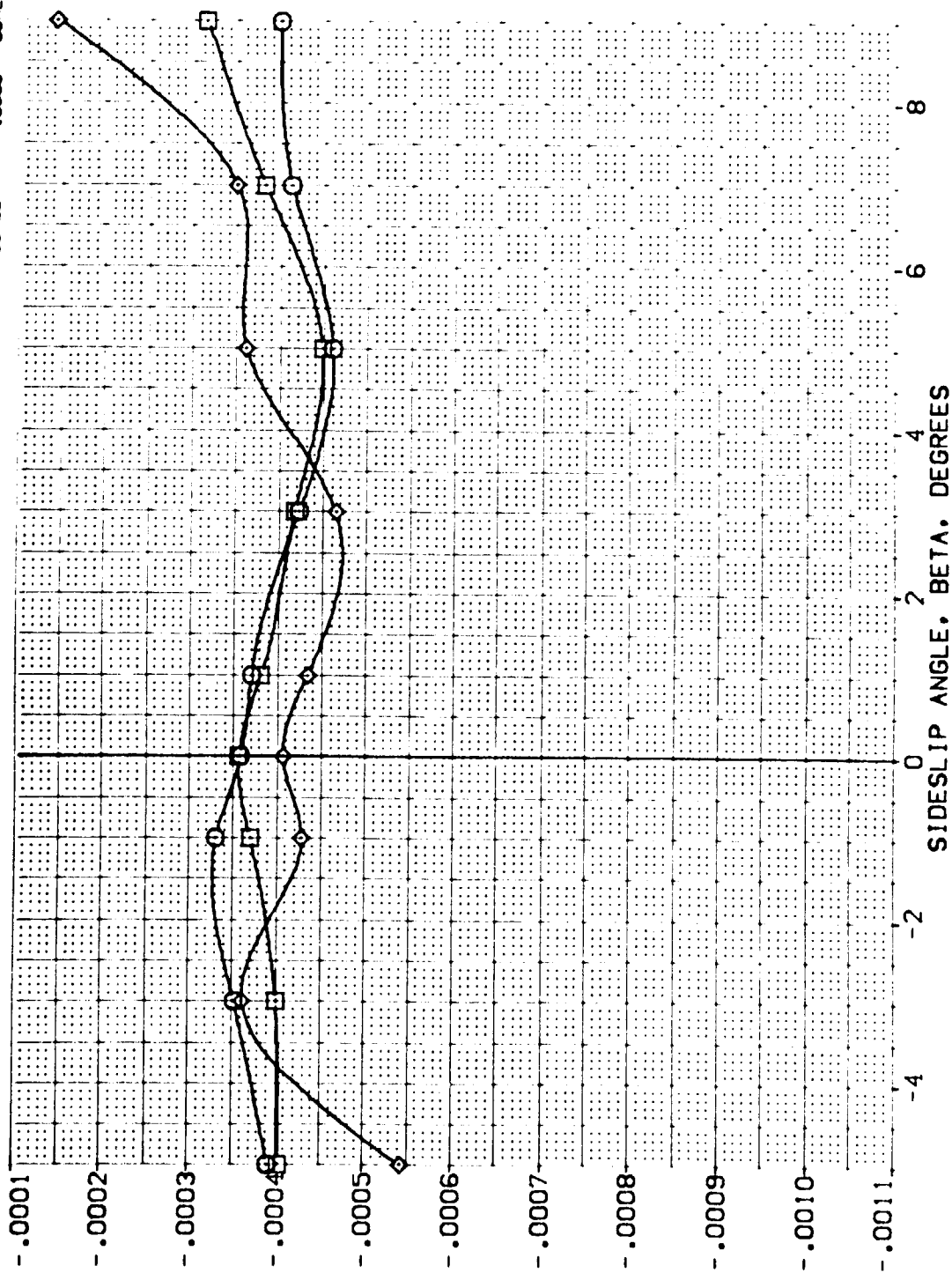


FIG. 24 RUDDER DERIVATIVES, SPEEDBRAKE 85 DEGREES

(E)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	DR	BDLAP	SPOBRK	REFERENCE INFORMATION
(VEJ046)	ARC 11-747 OAS3A B C M F VI V	0.000	-10.000	-11.700	85.000	SREF 2.4210 SQ.FT.
(VEJ047)	ARC 11-747 OAS3A B C M F VI V	10.000	-10.000	-11.700	85.000	LREF 14.2440 IN.
(VEJ048)	ARC 11-747 OAS3A B C M F VI V	20.000	-10.000	-11.700	85.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP 0.0000 IN.
						ZMRP 11.2500 IN.
						SCALE 0.0300

ROLLING MOMENT DUE TO RUDDER, DCBLDR, PER DEGREE, (BODY AXIS)

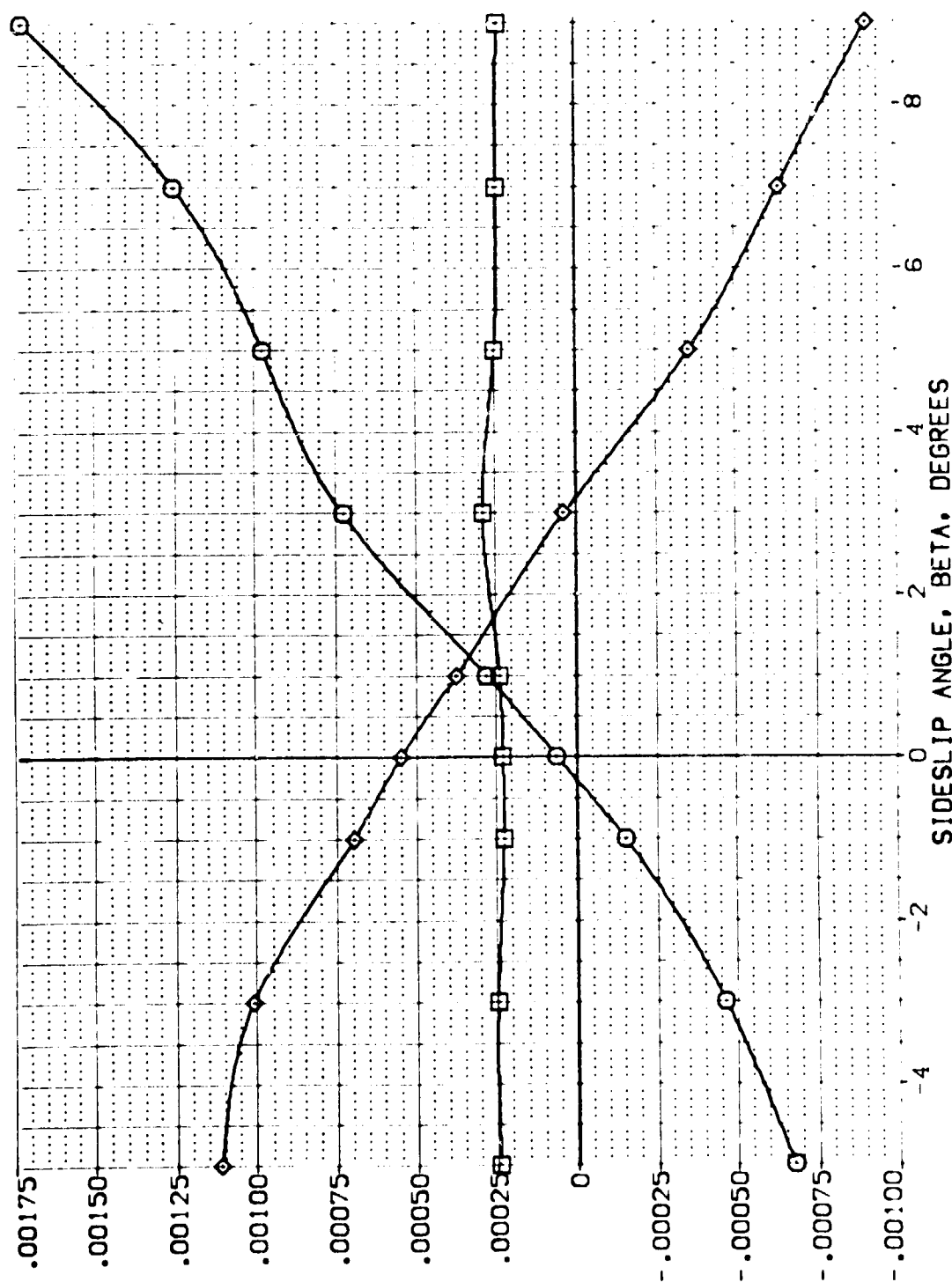


FIG. 24 RUDDER DERIVATIVES, SPEEDBRAKE 85 DEGREES

(A)MAC = .60

DATA SET SYMBOL CONFIGURATION DESCRIPTION

[VEJ016]	ARC 11-747	0A53A	B	C	H	F	V	V	NON	RV/L
[VEJ017]	ARC 11-747	0A53A	B	C	H	F	V	V	NON	RV/L
[VEJ048]	ARC 11-747	0A53A	B	C	H	F	V	V	NON	RV/L

ALPHA DR BOXLAP SPEEDBRK

0.000	-10.000	-11.700	85.000
10.000	-10.000	-11.700	85.000
20.000	-10.000	-11.700	85.000

REFERENCE INFORMATION

SREF	2.4210	50. FT.
LREF	14.2440	IN.
BREF	28.1004	IN.
XMRP	32.3010	IN.
YMRP	.0000	IN.
ZMRP	11.2500	IN.
SCALE	.0300	SCALE

ROLLING MOMENT DUE TO RUDDER, DCBLDR, PER DEGREE, (BODY AXIS)

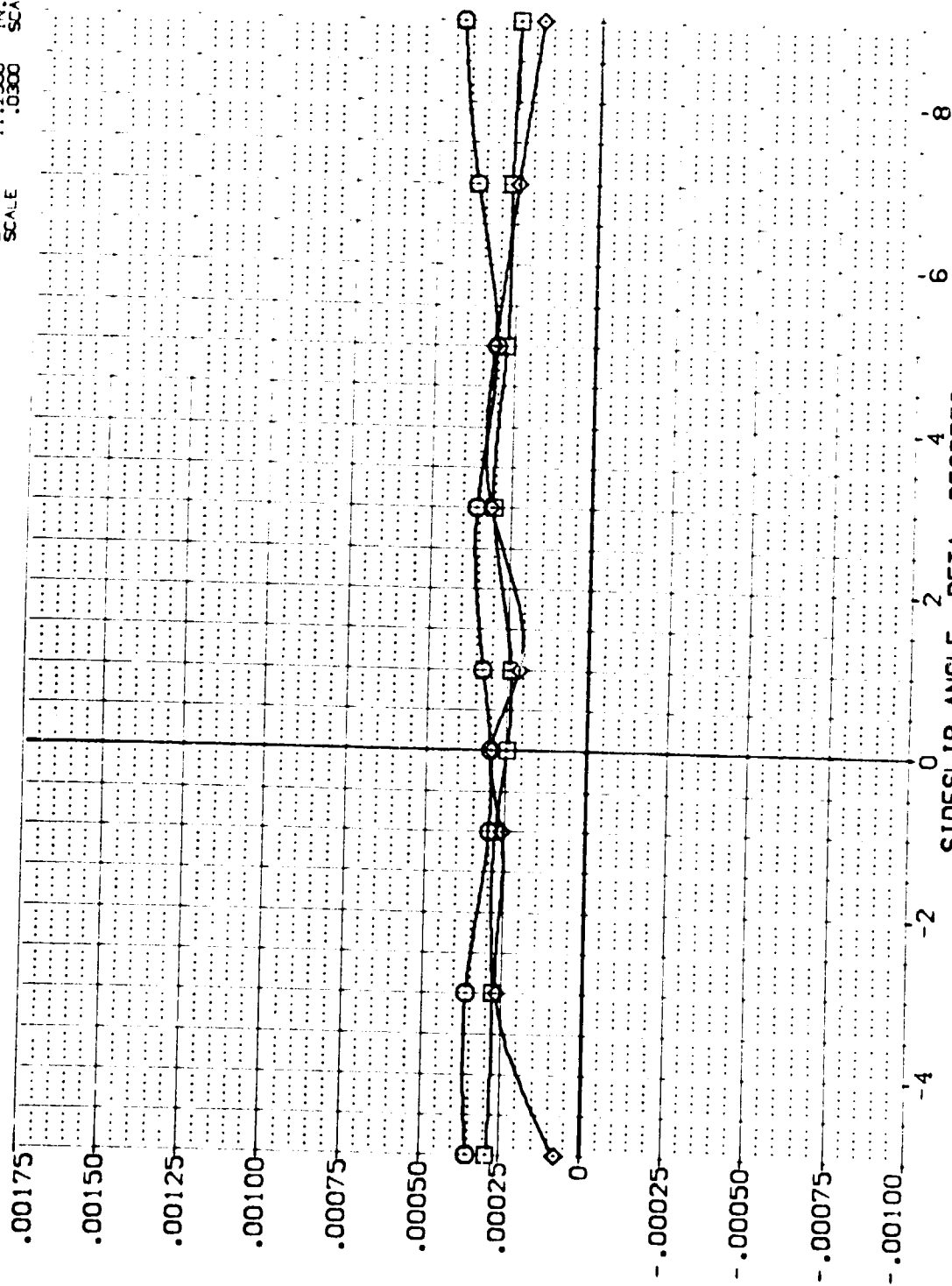


FIG. 24 RUDDER DERIVATIVES, SPEEDBRAKE 85 DEGREES

(B)MAC = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	DR	BD LAP	SPEED	REFERENCE INFORMATION
(VEJ046)	ARC 11-747 DASSA B C M F V	0.000	-10.000	-11.700	85.000	SREF 2.4210 SQ.FT.
(VEJ047)	ARC 11-747 DASSA B C M F V	10.000	-10.000	-11.700	85.000	LREF 14.2440
(VEJ048)	ARC 11-747 DASSA B C M F V	20.000	-10.000	-11.700	85.000	BREF 28.1004
						XMRD 32.3010
						YMRD .0000
						ZMRD 11.2500
						SCALE .0300

ROLLING MOMENT DUE TO RUDDER, DCBLDR, PER DEGREE, (BODY AXIS)

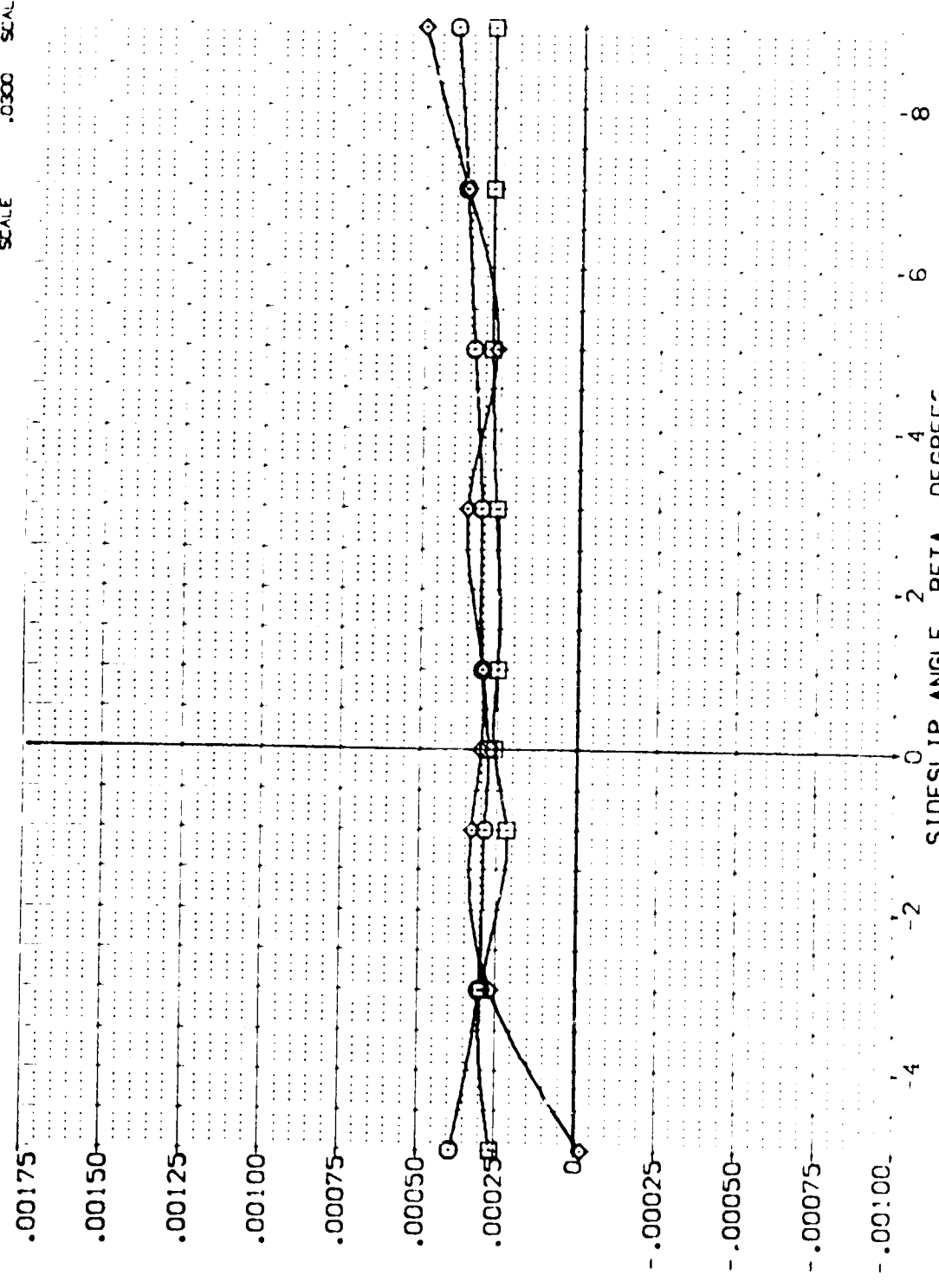
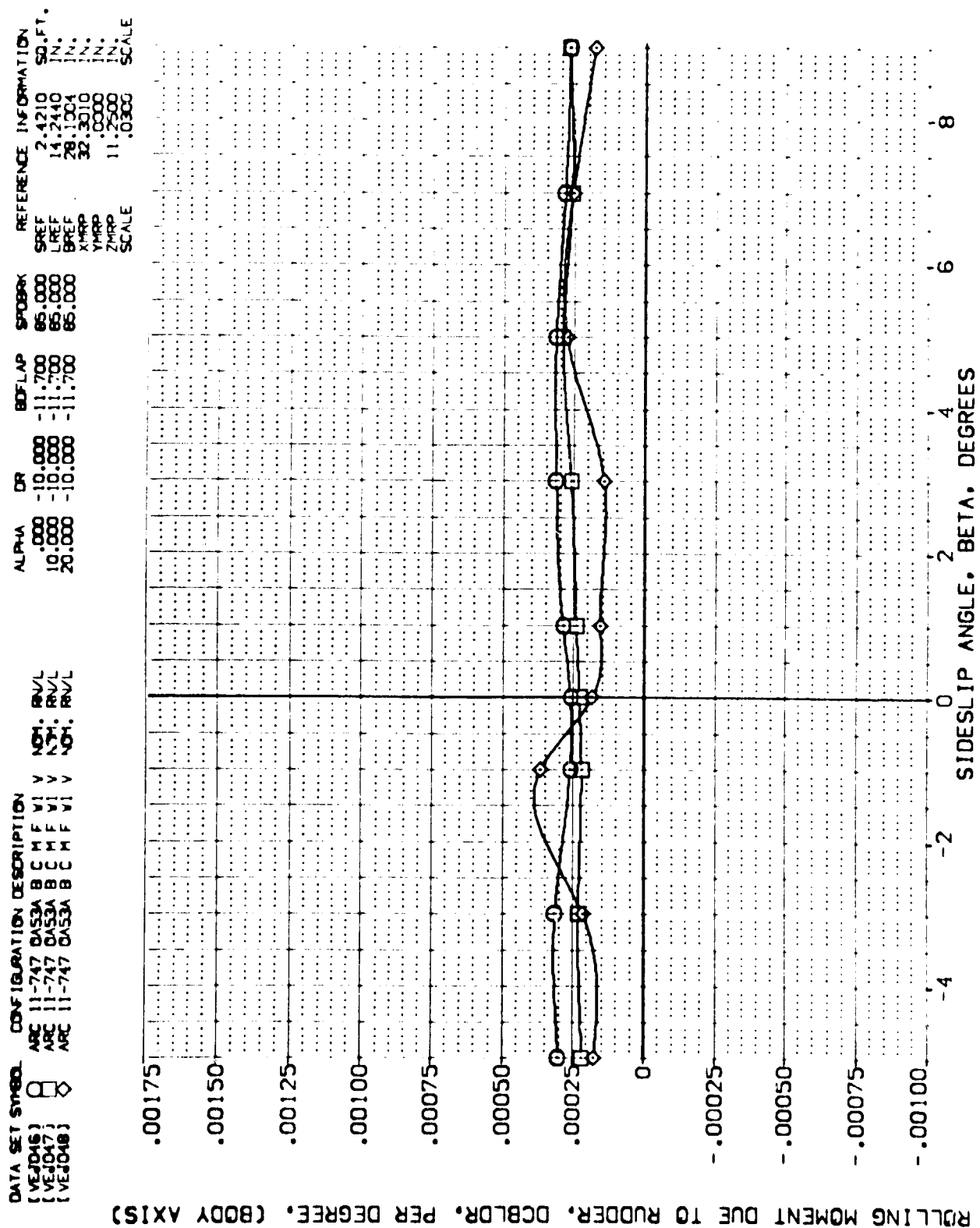


FIG. 24 RUDDER DERIVATIVES, SPEEDBRAKE 85 DEGREES

(C)MAC = .50



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	DR	BDFLAP	SPOBCK	REFERENCE INFORMATION
[VEJD46]	ARC 11-747 DA53A B C M F V I V	.000	-10.000	-11.700	85.000	SREF 2.4210 SQ.FT.
[VEJD47]	ARC 11-747 DA53A B C M F V I V	10.000	-10.000	-11.700	85.000	LREF 14.2440 IN.
[VEJD48]	ARC 11-747 DA53A B C M F V I V	20.000	-10.000	-11.700	85.000	BREF 28.1304 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300 SCALE

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	DR	BDLAP	SPOBRK	REFERENCE INFORMATION
(VEJ045)	ARC 11-747 DA53A B C H F V I V	.000	-10.000	-11.700	85.000	SREF 2.4210 SQ.FT.
(VEJ047)	ARC 11-747 DA53A B C H F V I V	10.000	-10.000	-11.700	85.000	LREF 14.2440 IN.
(VEJ048)	ARC 11-747 DA53A B C H F V I V	20.000	-10.000	-11.700	85.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP 11.0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

ROLLING MOMENT DUE TO RUDDER, DCBLDR, PER DEGREE, (BODY AXIS)

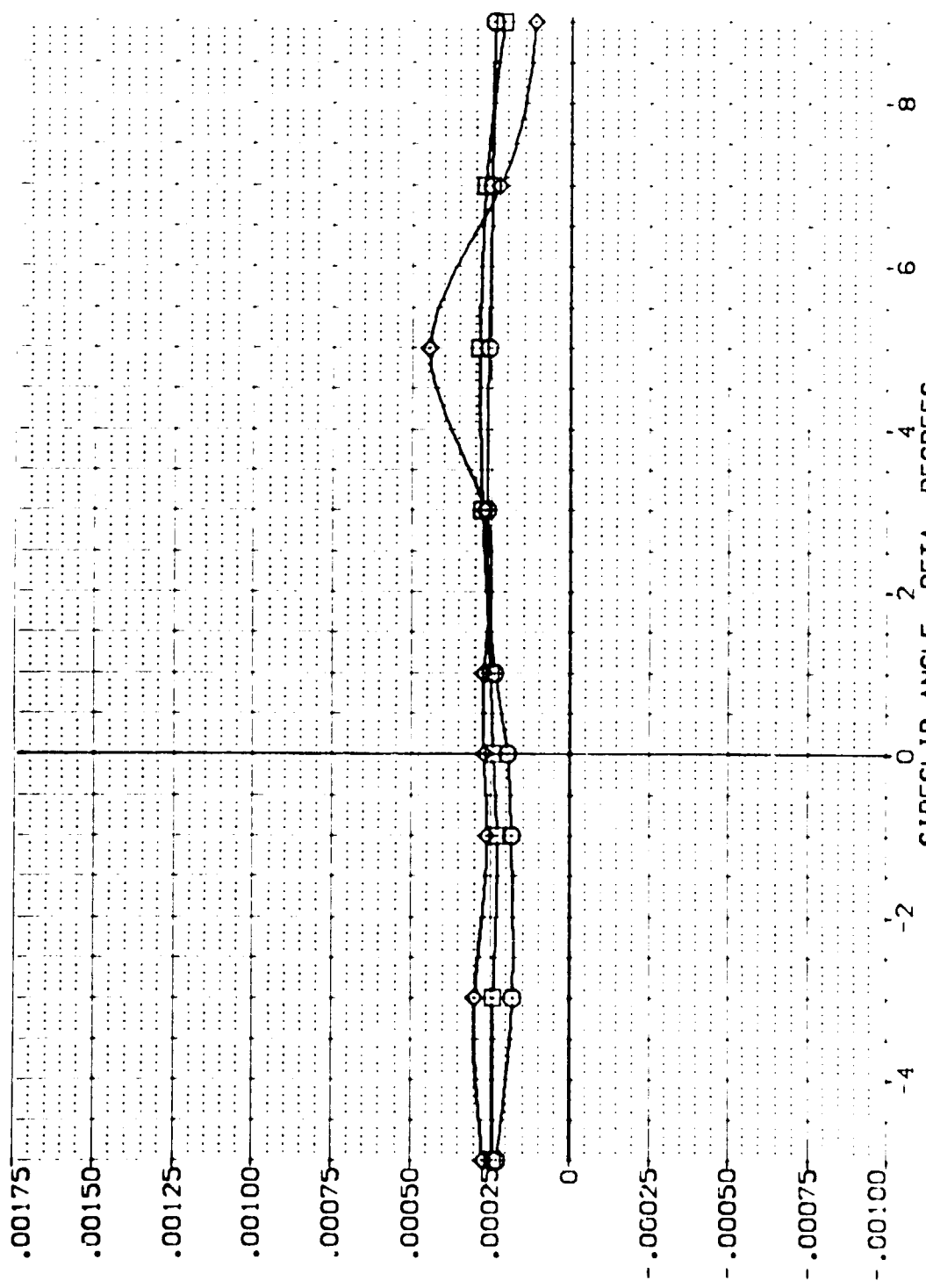


FIG. 24 RUDDER DERIVATIVES, SPEEDBRAKE 85 DEGREES

(E)MAC = 1.20

DATA SET SYMBOL CONFIGURATION DESCRIPTION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	DR	BDF LAP	SPOBRK	REFERENCE INFORMATION
{VEJ046}	ARC 11-747 QAS3A B C M F VI V	0.000	-10.000	-11.700	85.000	SREF 2.4210 SQ.FT.
{VEJ047}	ARC 11-747 QAS3A B C M F VI V	10.000	-10.000	-11.700	85.000	LREF 14.2440 N.
{VEJ048}	ARC 11-747 QAS3A B C M F VI V	20.000	-10.000	-11.700	85.000	BREF 28.1004 N.
						XREF 32.3010 N.
						YREF 0.0000 N.
						ZREF 11.2500 N.
						SCALE .0300

PITCHING MOMENT COEFF. DERIV WRT RUDDER DEFL., DCLMDR, PER DEG

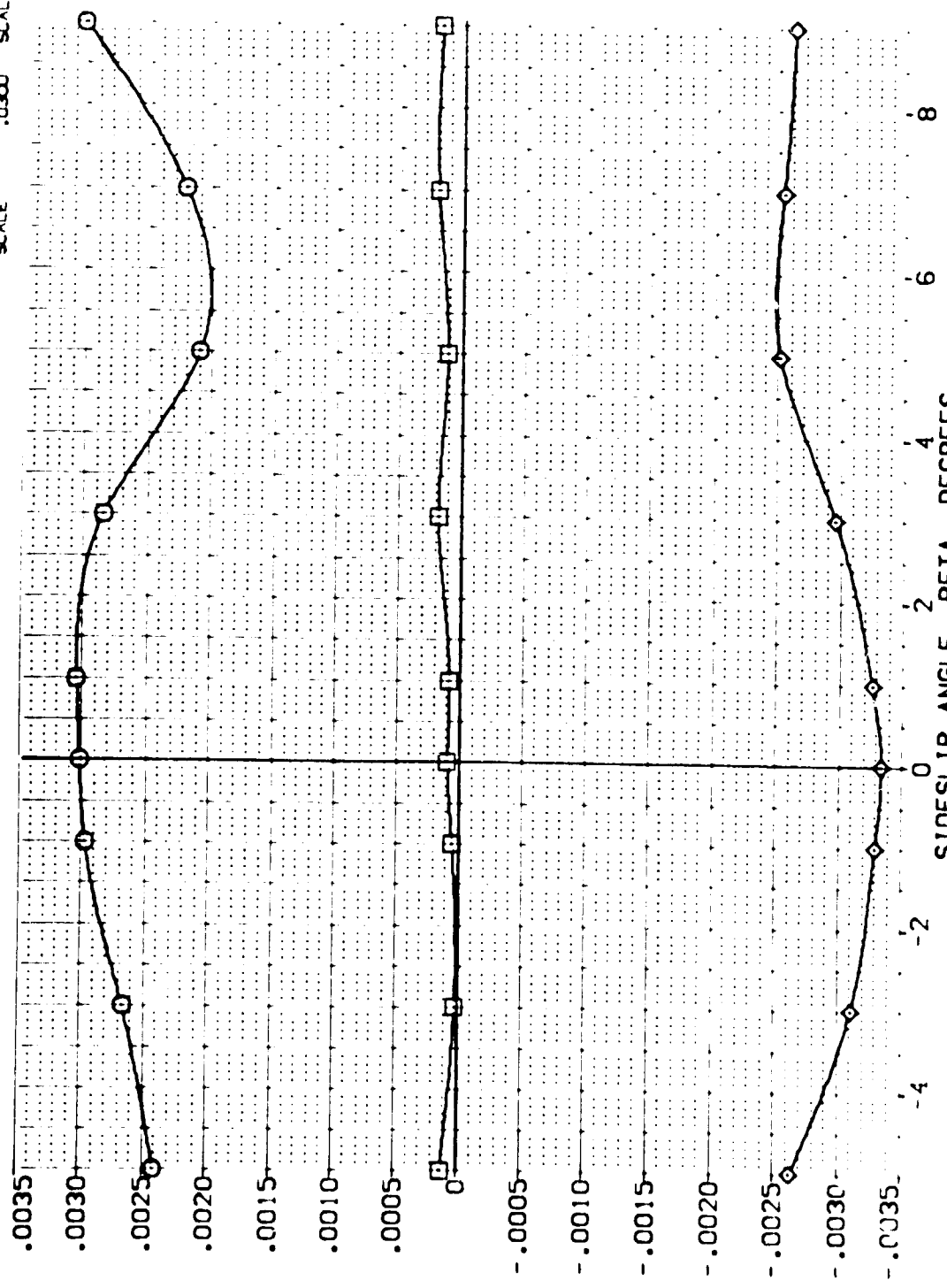


FIG. 24 RUDDER DERIVATIVES, SPEEDBRAKE 85 DEGREES

(A)MAC = .60





DATA SET SYMBOL CONFIGURATION DESCRIPTION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	DR	BOFLAP	SPOBRK	REFERENCE INFORMATION
[VEJ046]	ARC 11-747 0A53A B C H F VI V	0.000	-10.000	-11.700	85.000	SREF 2.4.10 SC.FT.
[VEJ047]	ARC 11-747 0A53A B C H F VI V	10.000	-10.000	-11.700	85.000	LREF 1.2440 IN.
[VEJ048]	ARC 11-747 0A53A B C H F VI V	20.000	10.000	-11.700	85.000	BREF 28.1001 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300 SCALE

PITCHING MOMENT COEFF. DERIV. WRT RUDDER DEFL., DCLMR, PER DEG

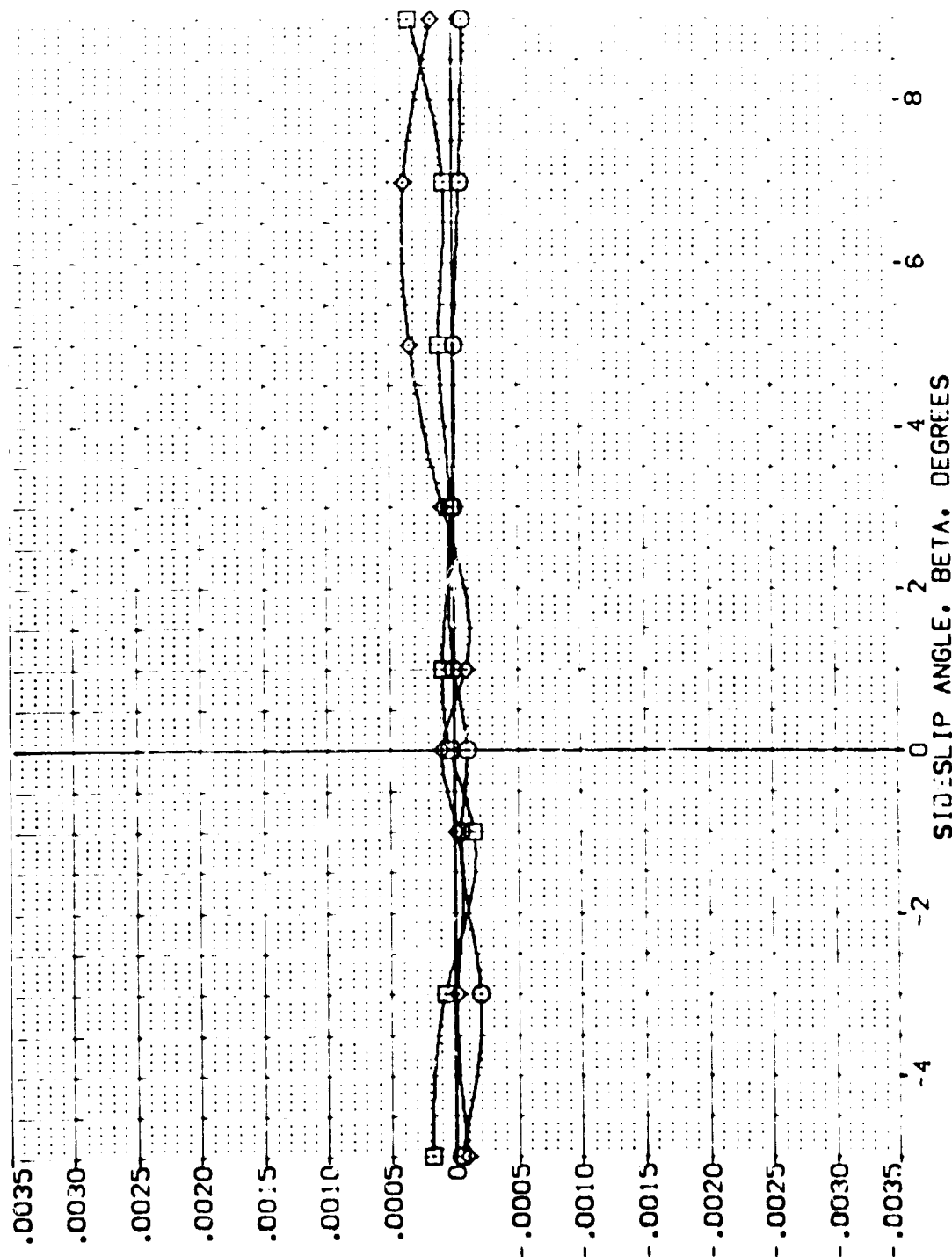


FIG. 24 RUDDER DERIVATIVES, SPEEDBRAKE 85 DEGREES

(C)MAC = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	DR	BDFLAP	SPEED	REFERENCE INFORMATION
[VEJ046]	ARC 11-747 QAS3A B C M F VI V	.000	-10.000	-11.700	85.000	SREF 2.42.0 SQ.FT.
[VEJ047]	ARC 11-747 QAS3A B C M F VI V	10.000	-10.000	-11.700	85.000	LREF 14.244 IN.
[VEJ048]	ARC 11-747 QAS3A B C M F VI V	20.000	-10.000	-11.700	85.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

PITCHING MOMENT COEFF. DERIV. WRT RUDDER DEFL., DCLMUR, PER DEG

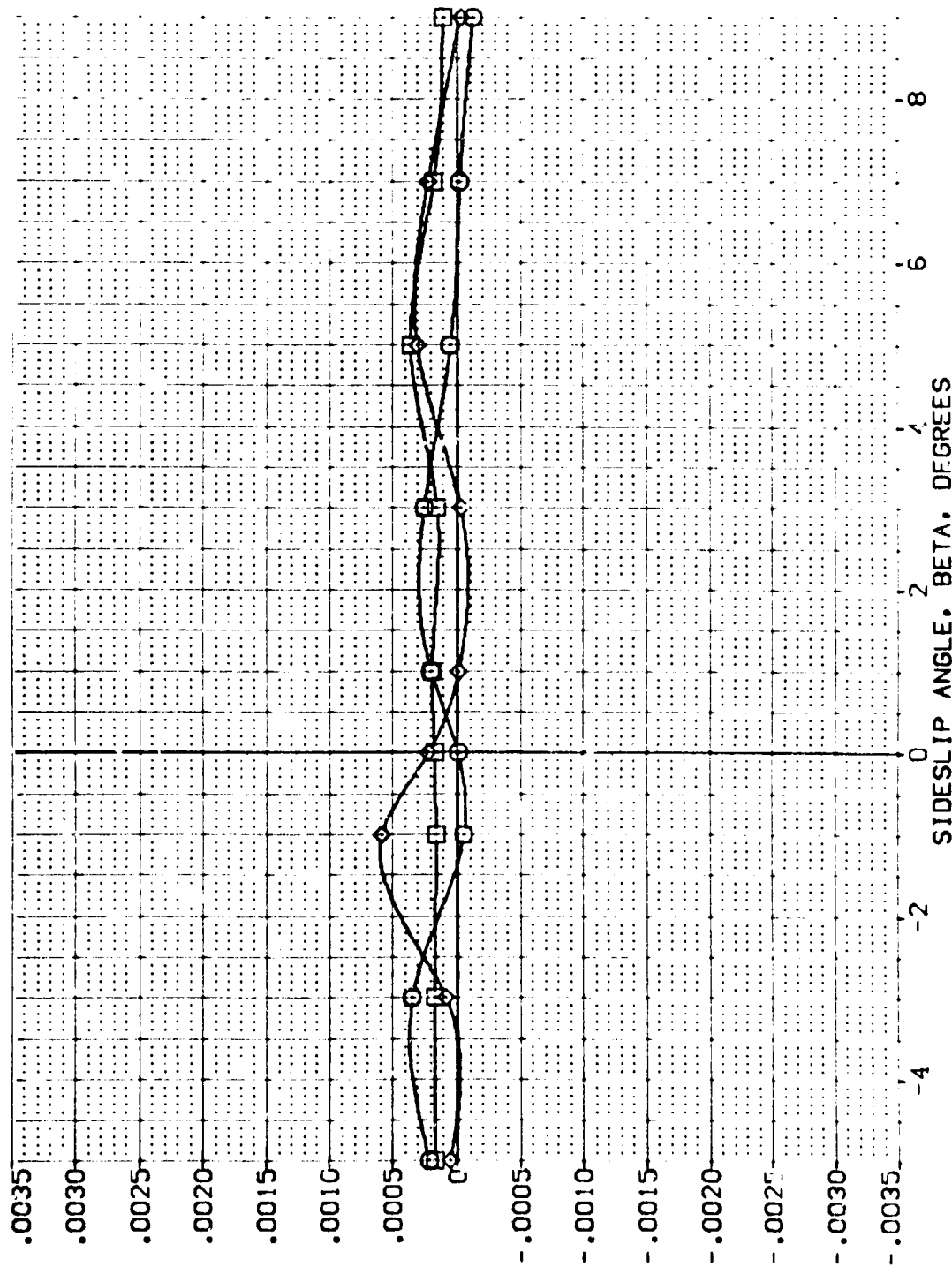


FIG. 24 RUDDER DERIVATIVES, SPEEDBRAKE 85 DEGREES

(D)MACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	DR	BOFLAP	SPOBRK	REFERENCE INFORMATION
{VEJ046}	ARC 11-747 OAS3A B C M F VI V	0.000	-10.000	-11.700	85.000	SREF 2.4210 SQ.FT.
{VEJ047}	ARC 11-747 OAS3A B C M F VI V	10.000	-10.000	-11.700	85.000	LREF 14.2440 IN.
{VEJ048}	ARC 11-747 OAS3A B C M F VI V	20.000	-10.000	-11.700	85.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP 0.0000 IN.
						ZMRP 11.2500 IN.
						SCALE 0.0300

PITCHING MOMENT COEFF. DERIV. WRT RUDDER DEF. DCLMDR. PER DEG

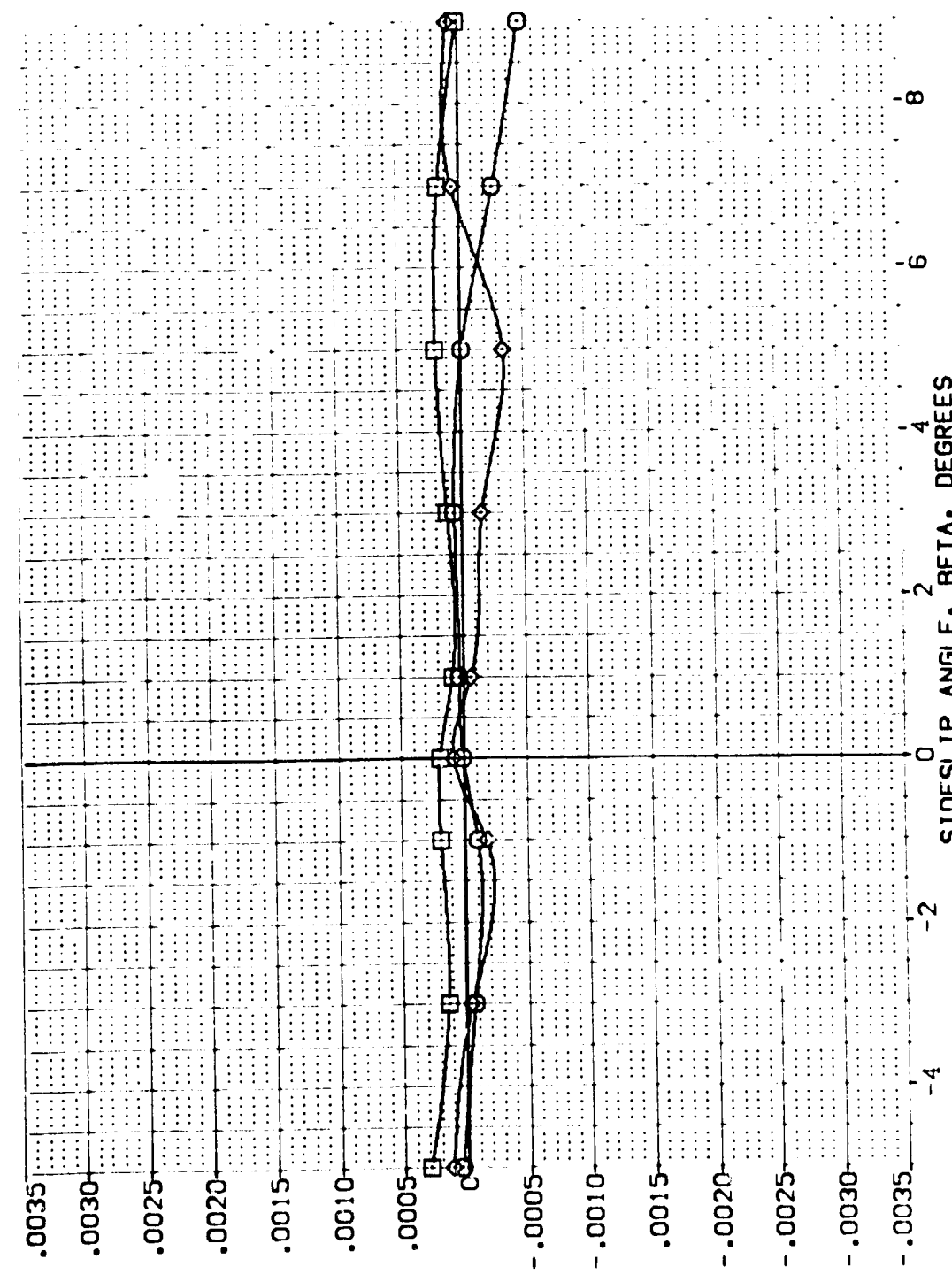


FIG. 24 RUDDER DERIVATIVES, SPEEDBRAKE 85 DEGREES

(E)MACH = 1.20

DATA SET: SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	50% LAP	SPDBRK	REFERENCE INFORMATION
[AEJ012]	ARC 11-747 BA53A B C M F VI V NM: RV/L	.000	.000	-11.700	25.000	SREF 2.4210 50. FT.
[AEJ023]	ARC 11-747 BA53A B C M F VI V NM: RV/L	.000	.000	-11.700	55.000	LREF 14.2440 IN.
[AEJ038]	ARC 11-747 BA53A B C M F VI V NM: RV/L	.000	.000	-11.700	85.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

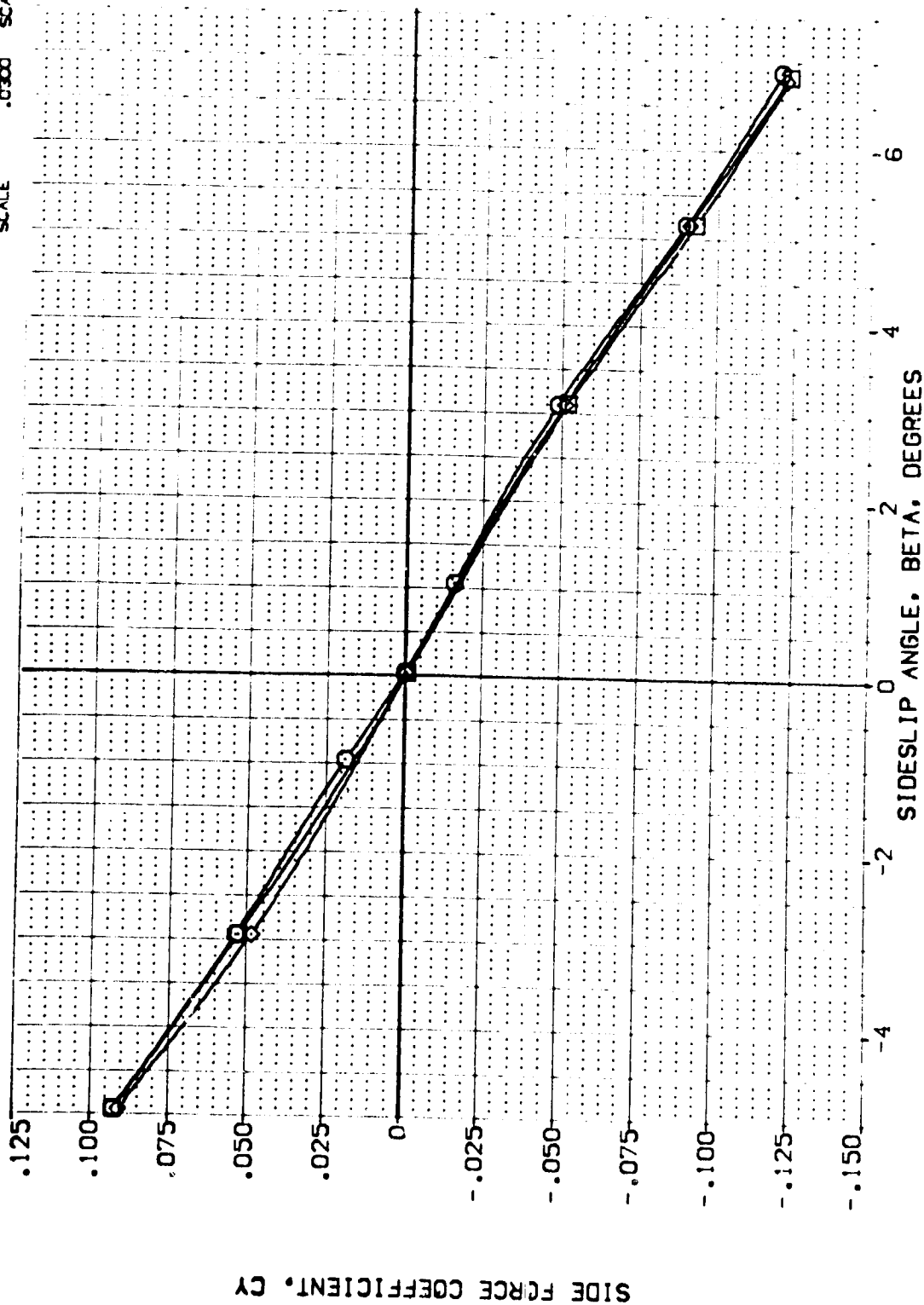


FIG. 25 SPEEDBRAKE EFFECTS

(A) MACH = .60

DATA SET SYMBOL: (AEJ012) (AEJ025) (AEJ038)

CONFIGURATION DESCRIPTION: ARC 11-747 OAS3A B C M F VI V NOM: RV/L ARC 11-747 OAS3A B C M F VI V NOM: RV/L ARC 11-747 OAS3A B C M F VI V NOM: RV/L

ALF: .000 .000 .000

RUDER: .000 .000 .000

BOFLAP: -11.700 -11.700 -11.700

SPOBRK: 25.000 55.000 85.000

REFERENCE INFORMATION: SREF 2.4210 50. FT. LREF 14.2440 IN. BREF 28.1004 IN. XMRP 32.3010 IN. YMRP .0000 IN. ZMRP 11.2500 IN. SCALE .0300

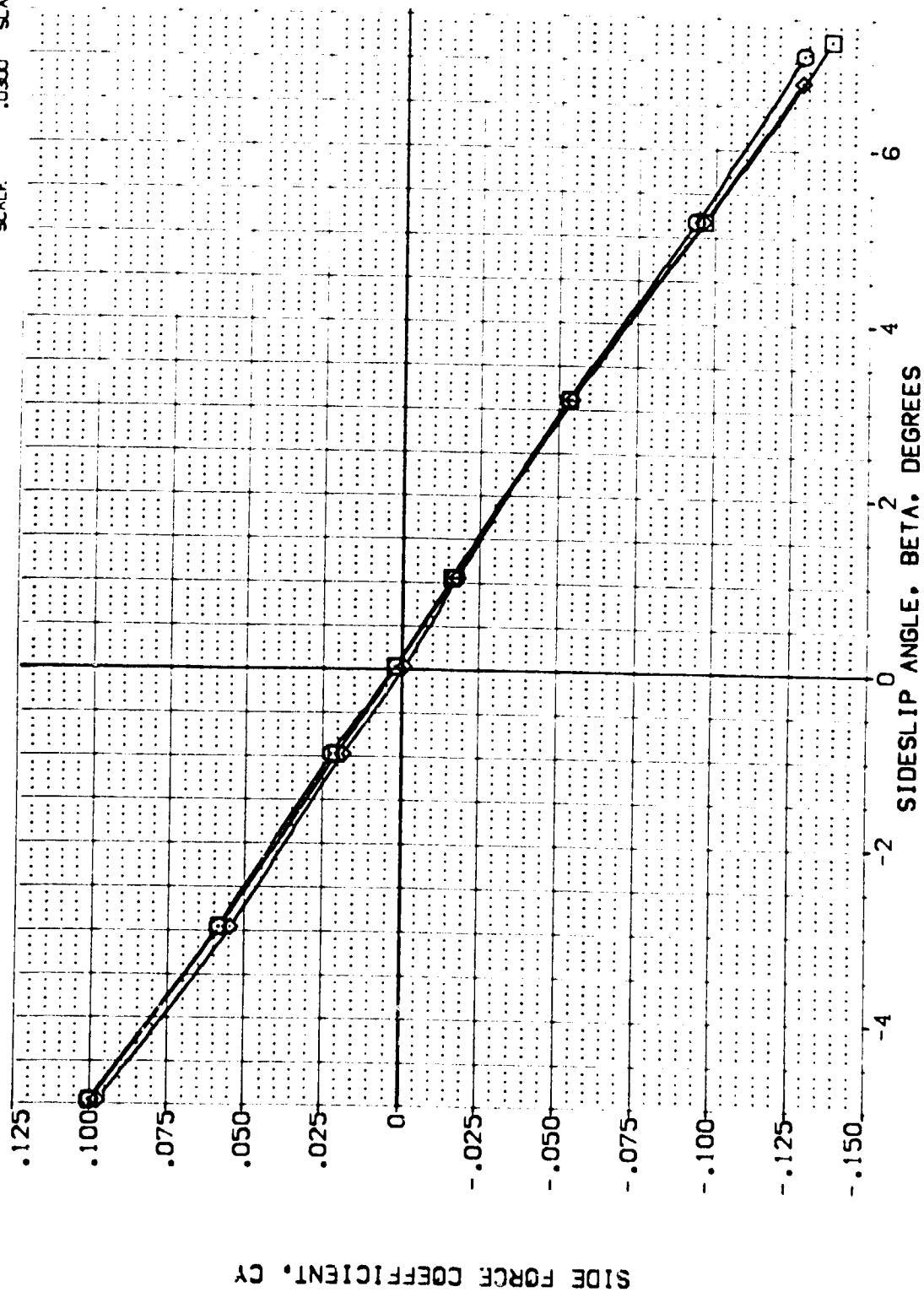


FIG. 25 SPEEDBRAKE EFFECTS

(B)MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BD FLAP	SPOILER	REFERENCE INFORMATION	
[ACJ012]	ARC 11-747 D453A B C M F VI V	.000	.000	-11.700	25.000	SREF	2.4210 50. FT.
[AEJ025]	ARC 11-747 D453A B C M F VI V	.000	.000	-11.700	55.000	LREF	14.2440 IN.
[AEJ038]	ARC 11-747 D453A B C M F VI V	.000	.000	-11.700	85.000	BREF	28.1004 IN.
						XREF	32.3010 IN.
						YREF	.0000 IN.
						ZREF	11.2500 IN.
						SCALE	.0300

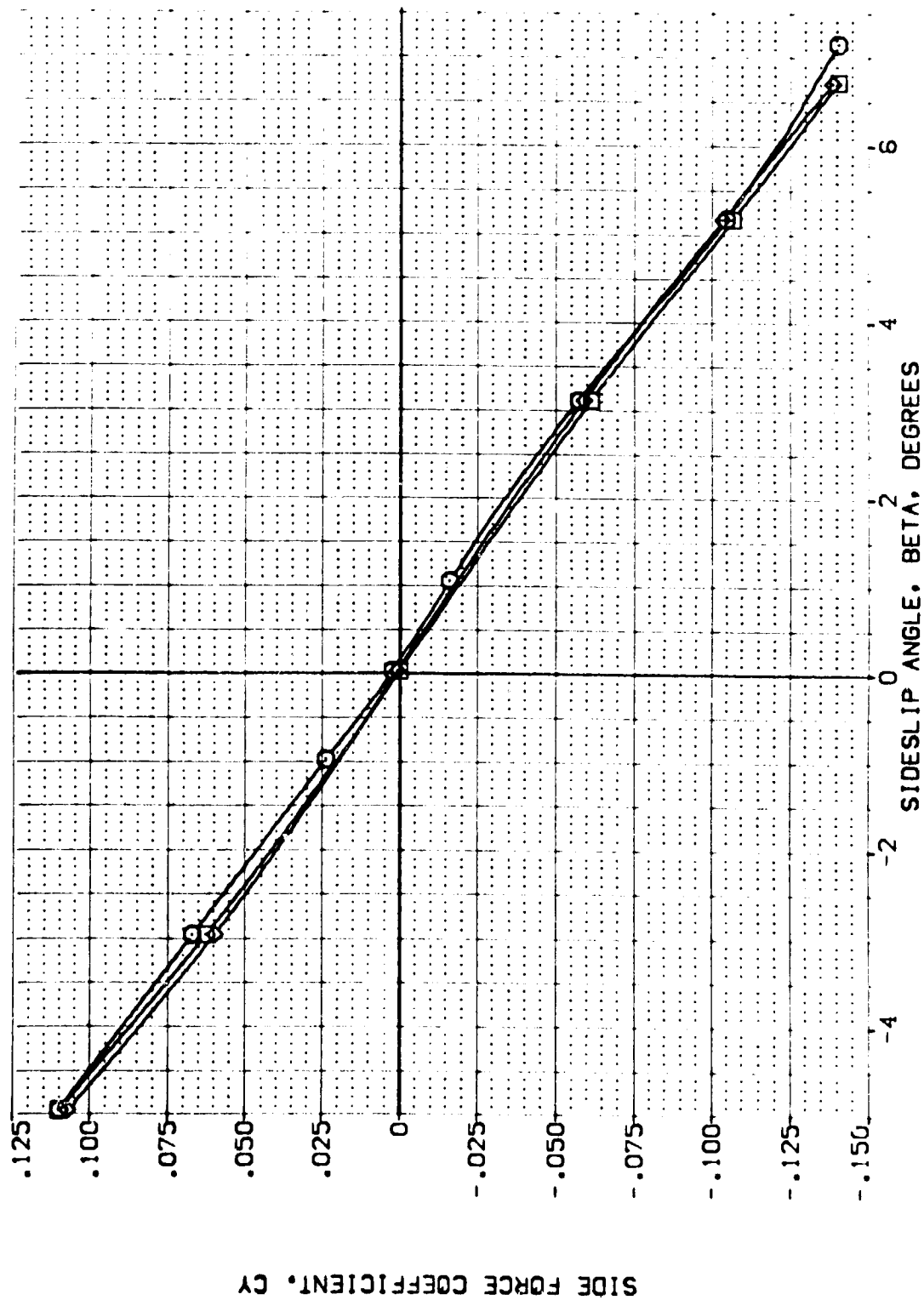


FIG. 25 SPEEDBRAKE EFFECTS

(C)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BD/LAP	SPOBRK	REFERENCE INFORMATION
(AE1012)	ARC 11-747 BA53A B C H F VI V	.000	.000	-11.700	25.000	SREF 2.4210 50. FT.
(AE1025)	ARC 11-747 BA53A B C H F VI V	.000	.000	-11.700	55.000	LREF 14.2440 IN.
(AE1038)	ARC 11-747 BA53A B C H F VI V	.000	.000	-11.700	85.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP 11.0000 IN.
						ZMRP 11.2300 IN.
						SCALE .0370

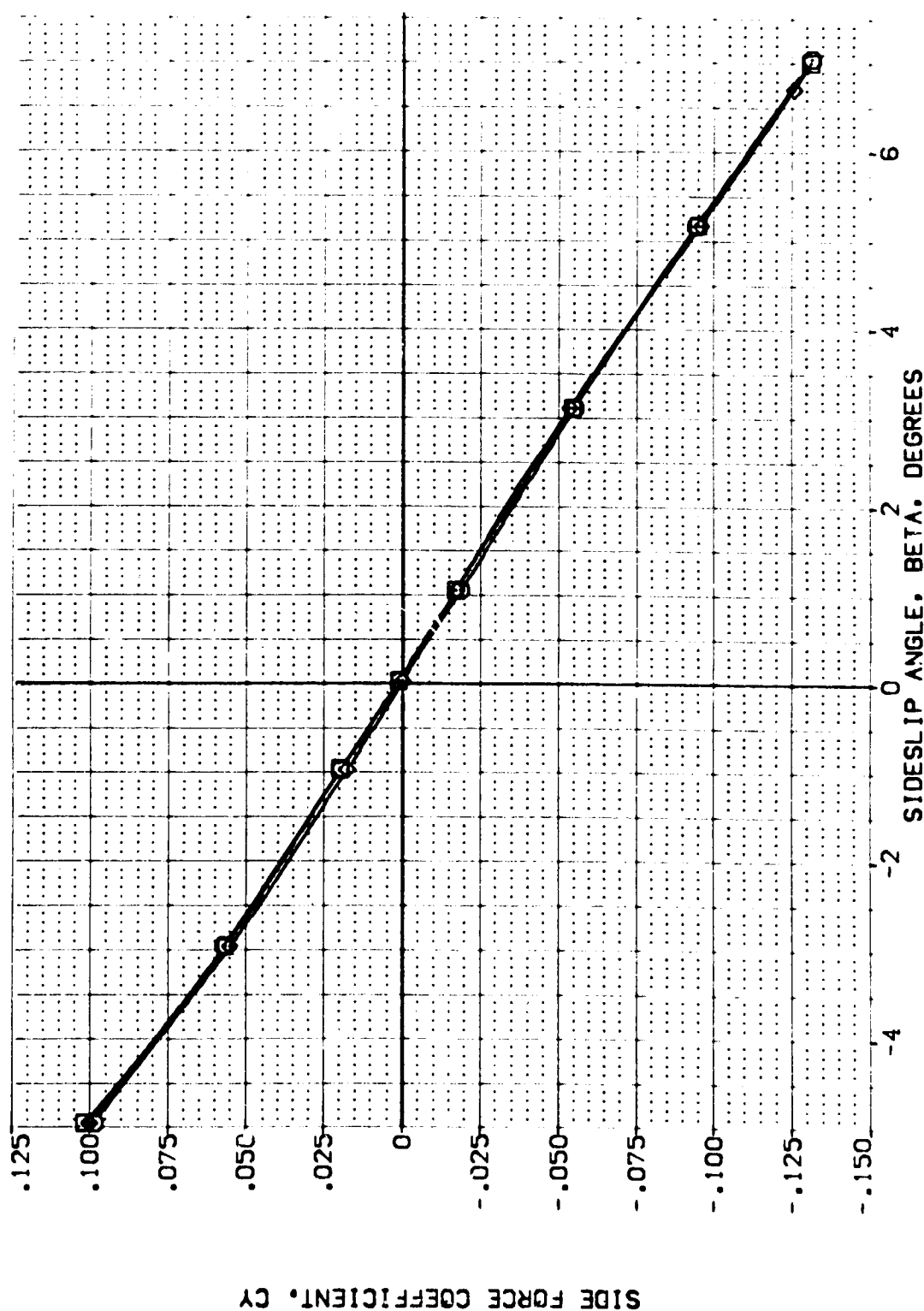


FIG. 25 SPLEDBRAKE EFFECTS

(0)MACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPDBRK	REFERENCE INFORMATION
(AEJ012)	ARC 1 747 B453A B C M F V1 V	.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(AEJ025)	ARC 1 747 B453A B C M F V1 V	.000	.000	-11.700	55.000	LREF 14.2440 IN.
(AEJ038)	ARC 1 747 B453A B C M F V1 V	.000	.000	-11.700	85.000	BREF 28.1004 IN.
						MREF 32.3010 IN.
						YMRP 0.0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300 SCALE

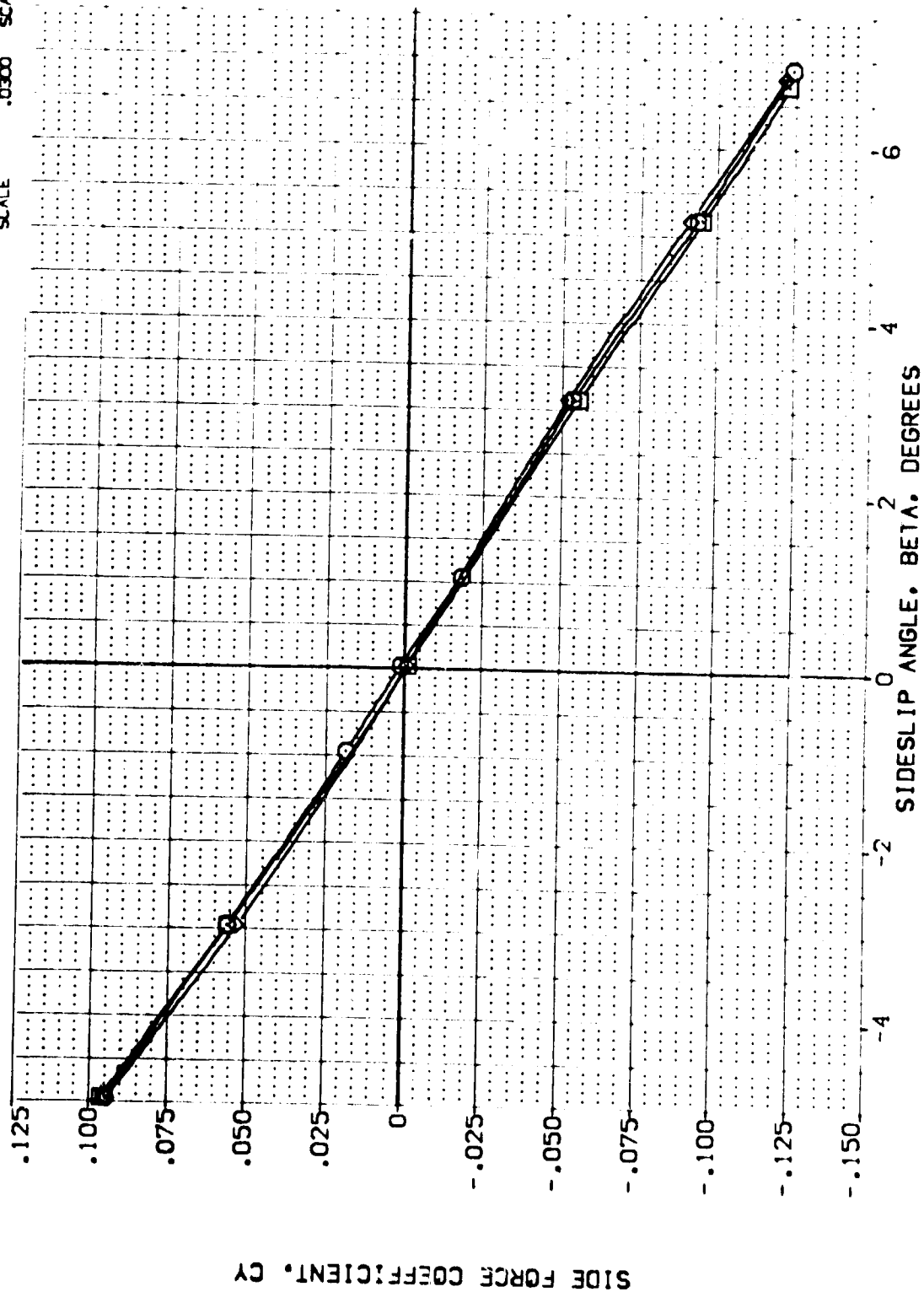


FIG. 25 SPEEDBRAKE EFFECTS

(M)MACH = 1.20



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	ED/LAP	SPOBRK	REFERENCE INFORMATION
(AEJ012)	ARC 11-747 DAS3A B C H F VI V	.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(AEJ025)	ARC 11-747 DAS3A B C H F VI V	.000	.000	-11.700	55.000	LREF 14.2440 IN.
(AEJ038)	ARC 11-747 DAS3A B C H F VI V	.000	.000	-11.700	85.000	BREF 28.1004 IN.
						YMRP 32.3010 IN.
						ZMRP .0000 IN.
						SCALE 11.2500 IN.

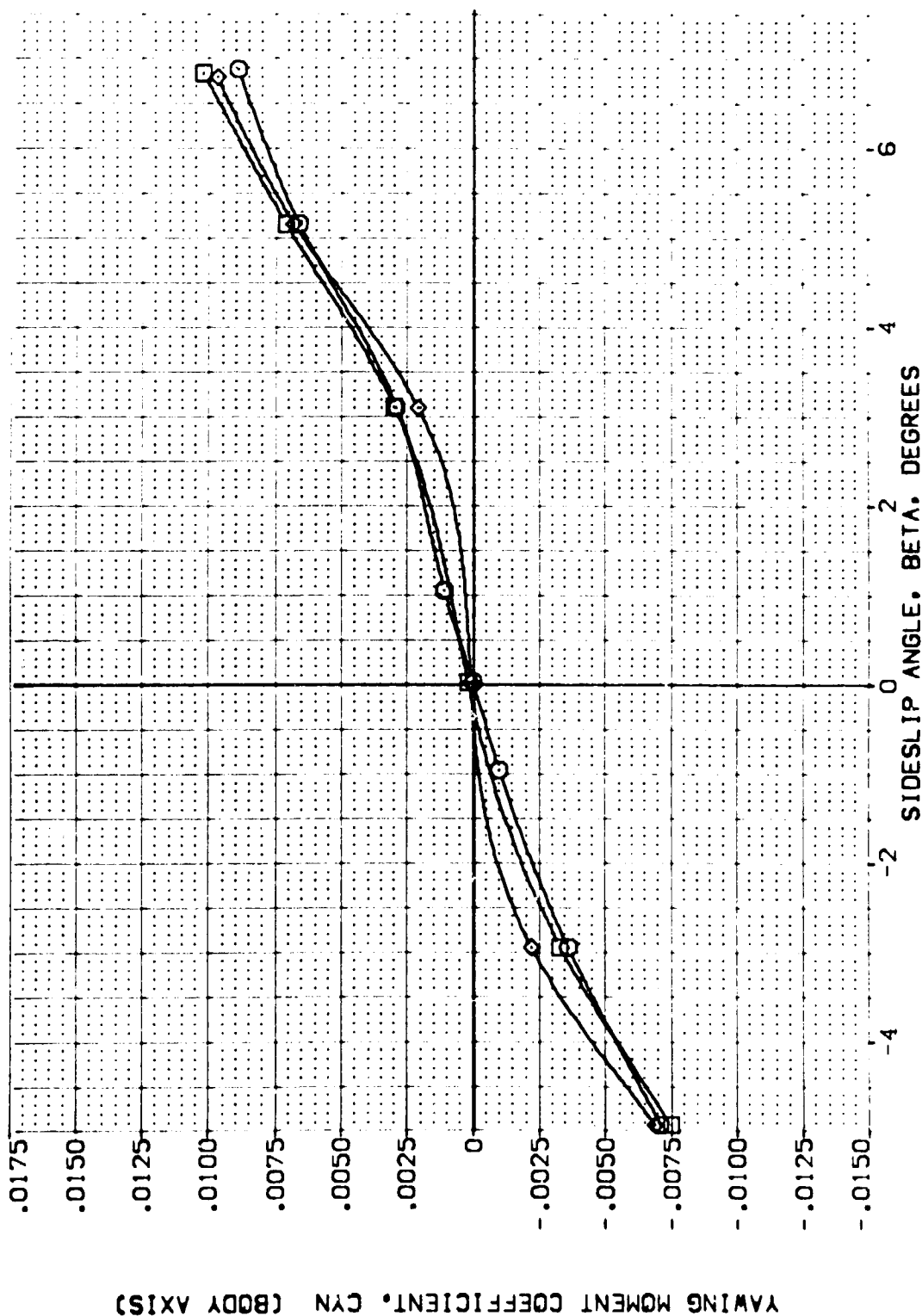


FIG. 25 SPEEDBRAKE EFFECTS

(A) MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPOBRK	REFERENCE INFORMATION
(AEJ012)	ARC 11-747 0A53A B C M F VI V	.000	.000	-11.700	25.000	SPREF 2.4210 50.0 FT.
(AEJ025)	ARC 11-747 0A53A B C M F VI V	.000	.000	-11.700	55.000	LREF 14.2440 IN.
(AEJ038)	ARC 11-747 0A53A B C M F VI V	.000	.000	-11.700	85.000	BREF 28.1004 IN.
						VMRP 32.3010 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

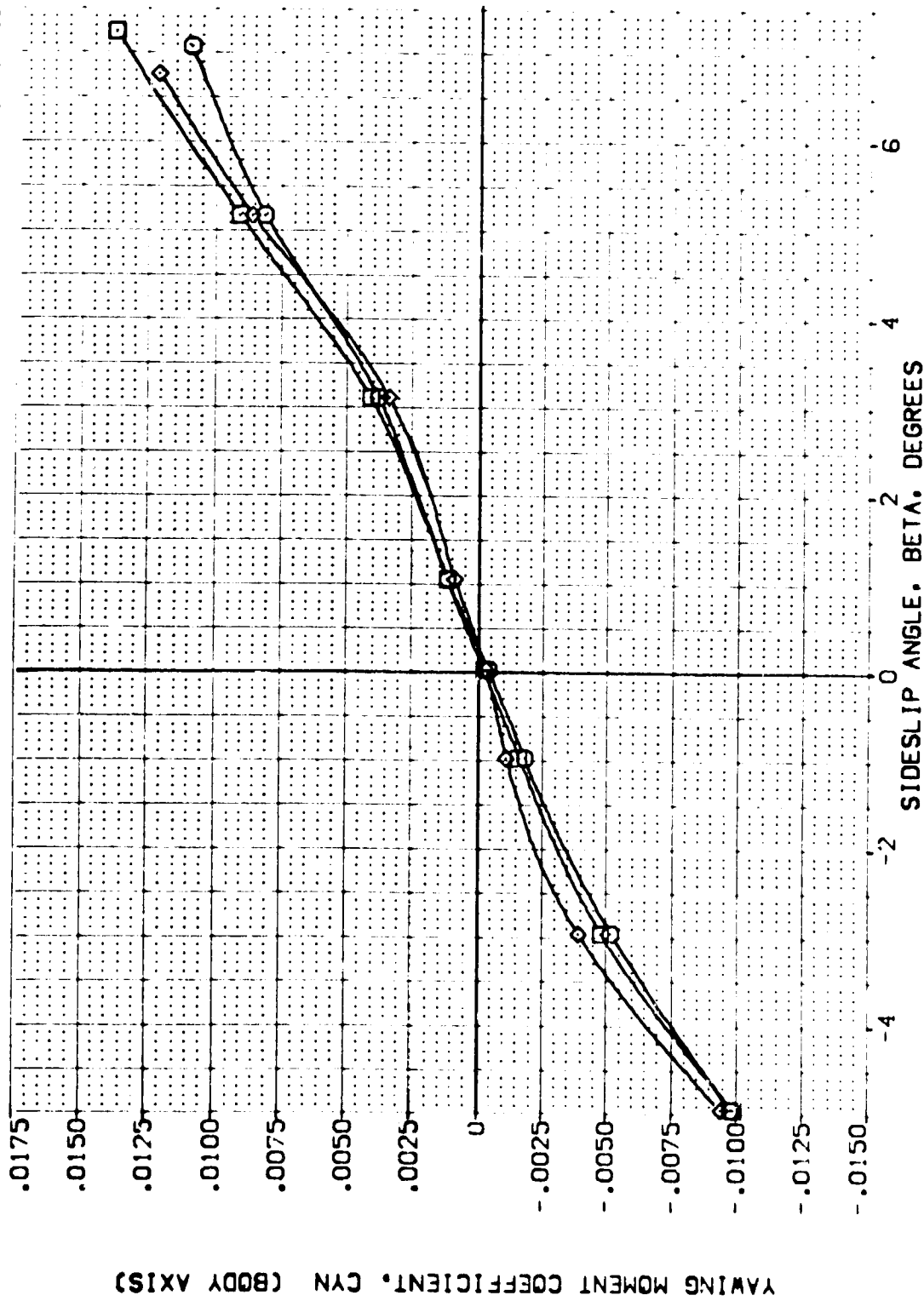


FIG. 25 SPEEDBRAKE EFFECTS

(B)MAC = .80

DATA SET SYMBOL		CONFIGURATION DESCRIPTION		ALPHA		RUDDER		BOFLAP		SPOBRK		REFERENCE INFORMATION	
{ AEJ012 }	ARC 11-747	DA53A	B C M F VI	.000	.000	.000	.000	-11.700	75.000	SREF	2.4210	50. FT.	
{ AEJ023 }	ARC 11-747	DA53A	B C M F VI	.000	.000	.000	.000	-11.700	75.000	LREF	14.2440	IN.	
{ AEJ028 }	ARC 11-747	DA53A	B C M F VI	.000	.000	.000	.000	-11.700	85.000	BREF	28.1004	IN.	
										XMRP	32.3010	IN.	
										YMRP	11.2500	IN.	
										ZMRP	.0300	SCALE	

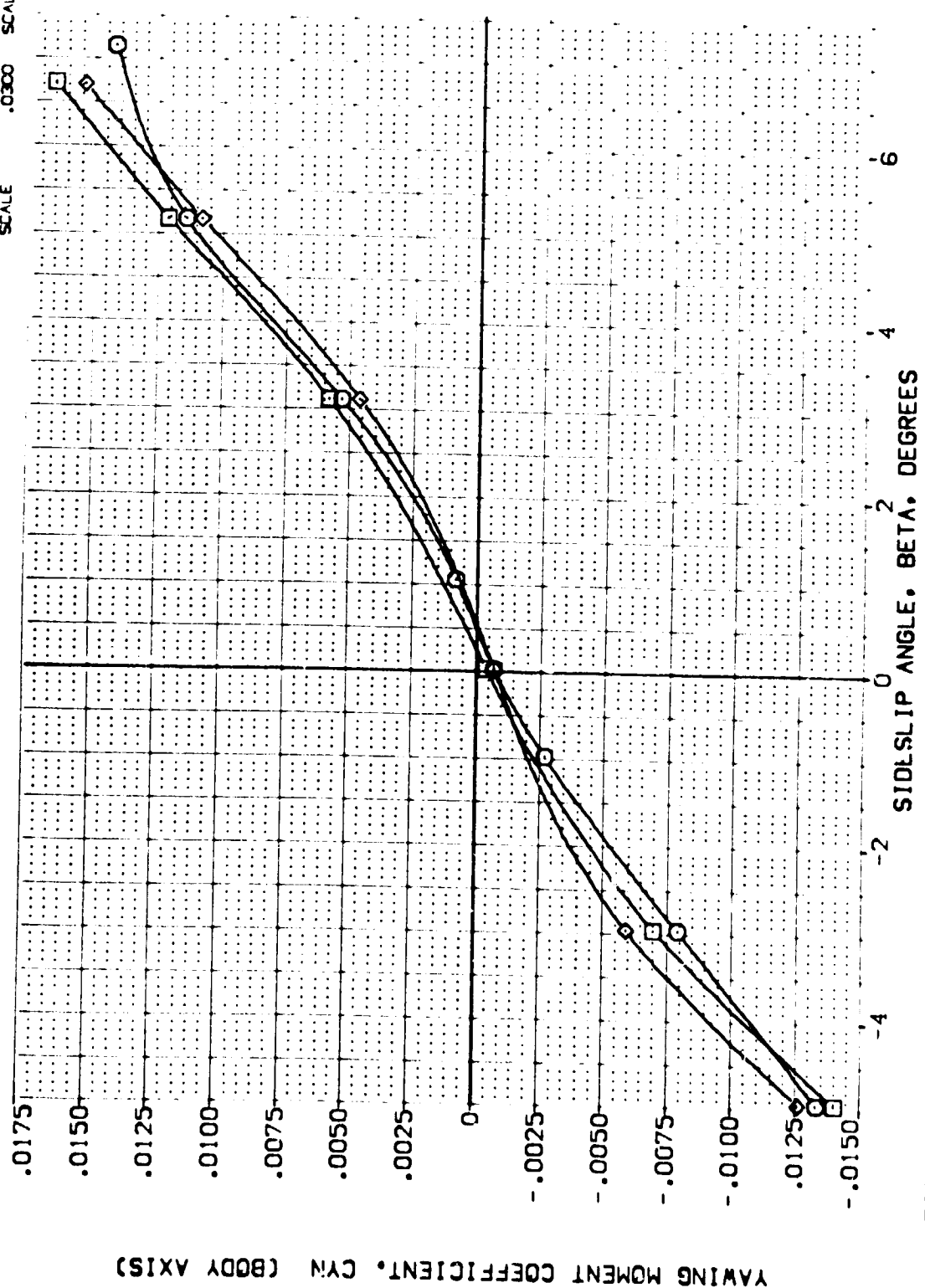
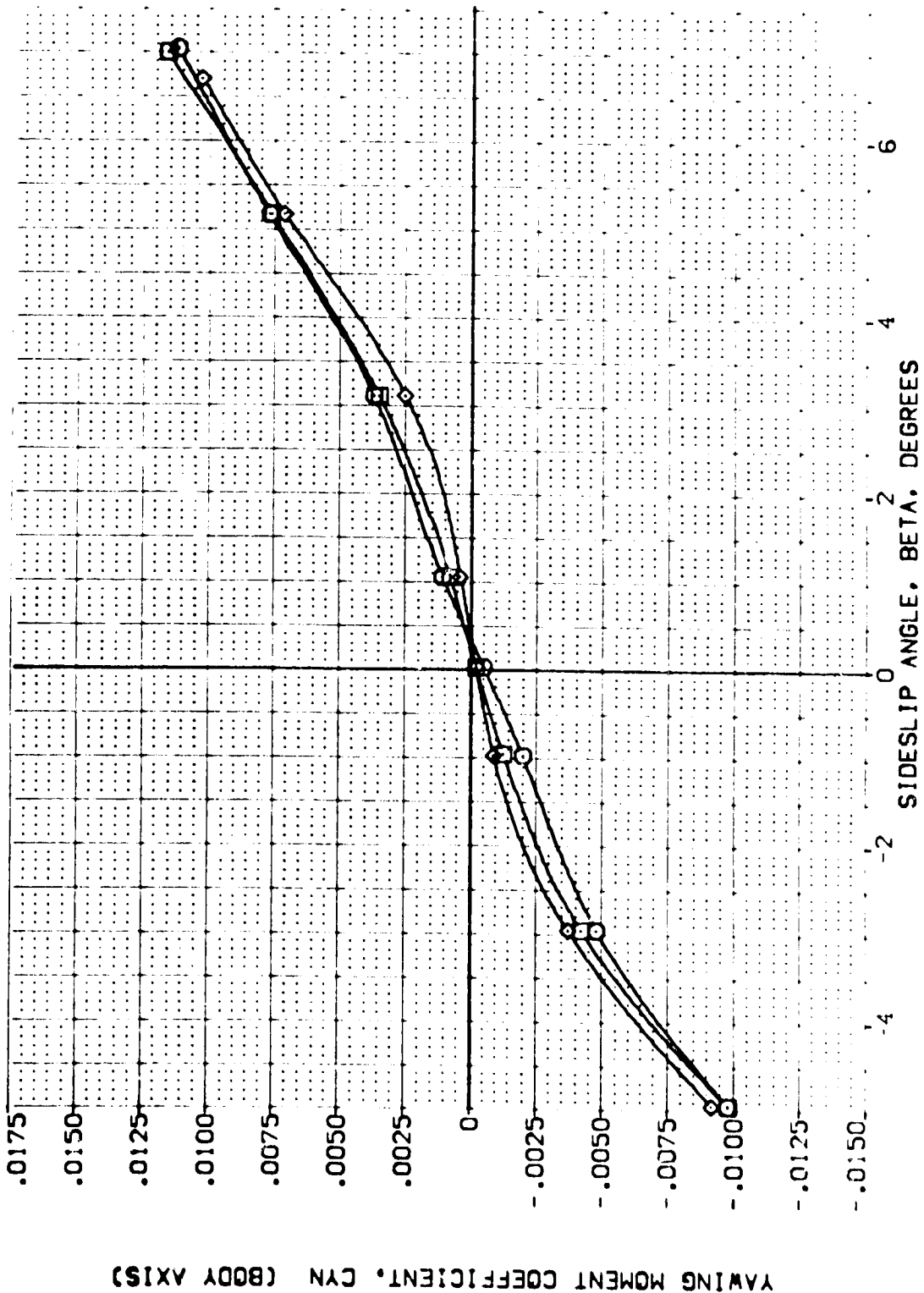


FIG. 25 SPEEDBRAKE EFFECTS

(C)MAC = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BD/LAP	SPOBRK	REFERENCE INFORMATION
[AEJ012]	ARC 11-747 BA33A B C H F VI V	.000	.000	-11.700	25.000	SREF 7.4210 SQ.FT.
[AEJ025]	ARC 11-747 BA33A B C H F VI V	.000	.000	-11.700	55.000	LREF 14.2440 IN.
[AEJ038]	ARC 11-747 BA33A B C H F VI V	.000	.000	-11.700	65.000	BREF 20.1004 IN.
						XMRP 32.3010 IN.
						YMRP 11.2500 IN.
						ZMRP .0300 IN.
						SCALE



YAWING MOMENT COEFFICIENT, CYN (BODY AXIS)

FIG. 25 SPEEDBRAKE EFFECTS

(O)MAC = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPOBRK	REFERENCE INFORMATION
{AEJ012}	ARC 11-747 D453A B C M F V1 V	.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
{AEJ025}	ARC 11-747 D453A B C M F V1 V	.000	.000	-11.700	55.000	LREF 14.2440 IN.
{AEJ038}	ARC 11-747 D453A B C M F V1 V	.000	.000	-11.700	85.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

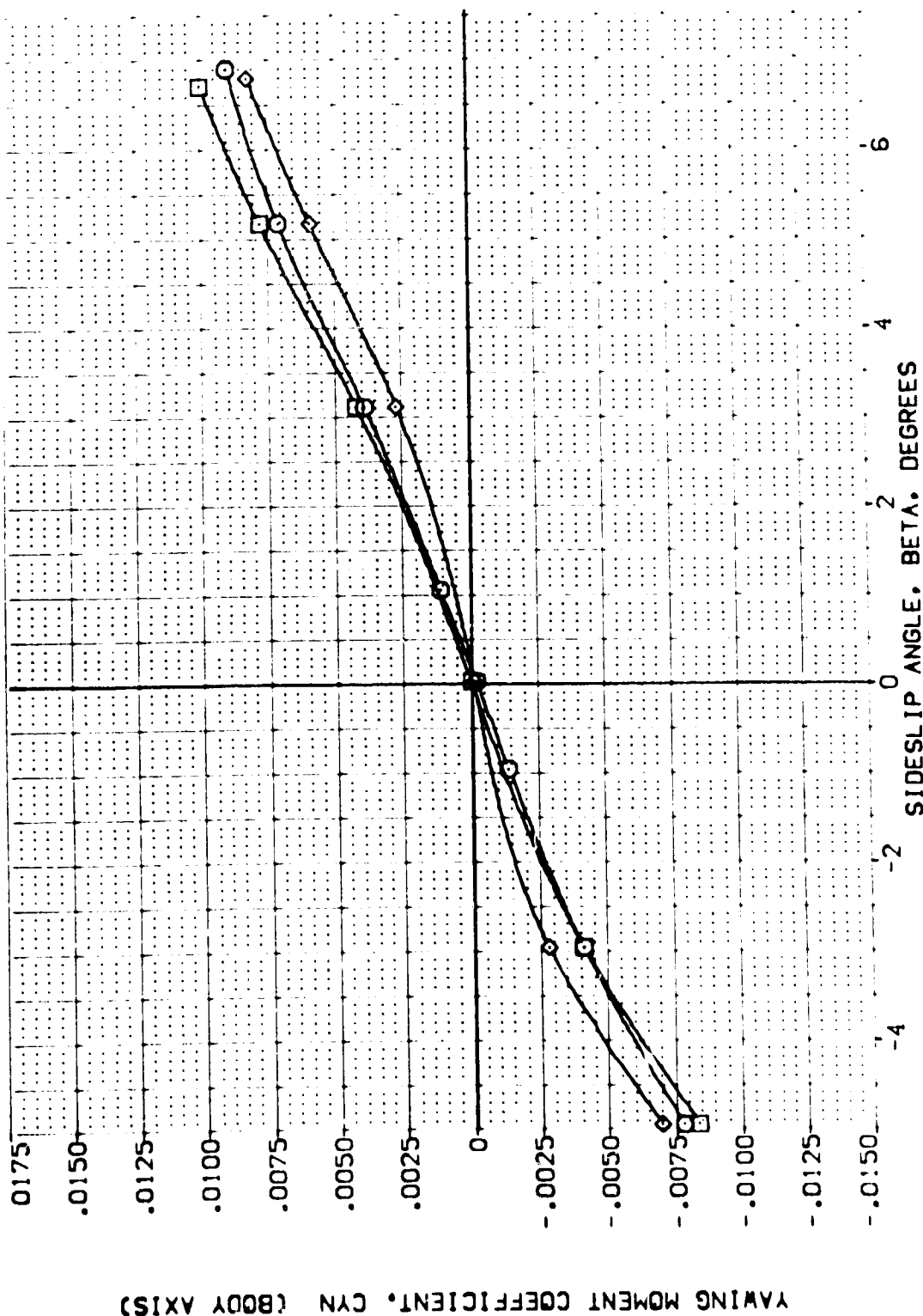


FIG. 25 SPEEDBRAKE EFFECTS

(E)MAC = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPOBRK	REFERENCE INFORMATION
(AE1012)	ARC 11-747 QAS3A B C H F VI V	.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(AE1025)	ARC 11-747 QAS3A B C H F VI V	.000	.000	-11.700	55.000	LREF 14.2440 IN.
(AE1038)	ARC 11-747 QAS3A B C H F VI V	.000	.000	-11.700	85.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP 11.0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

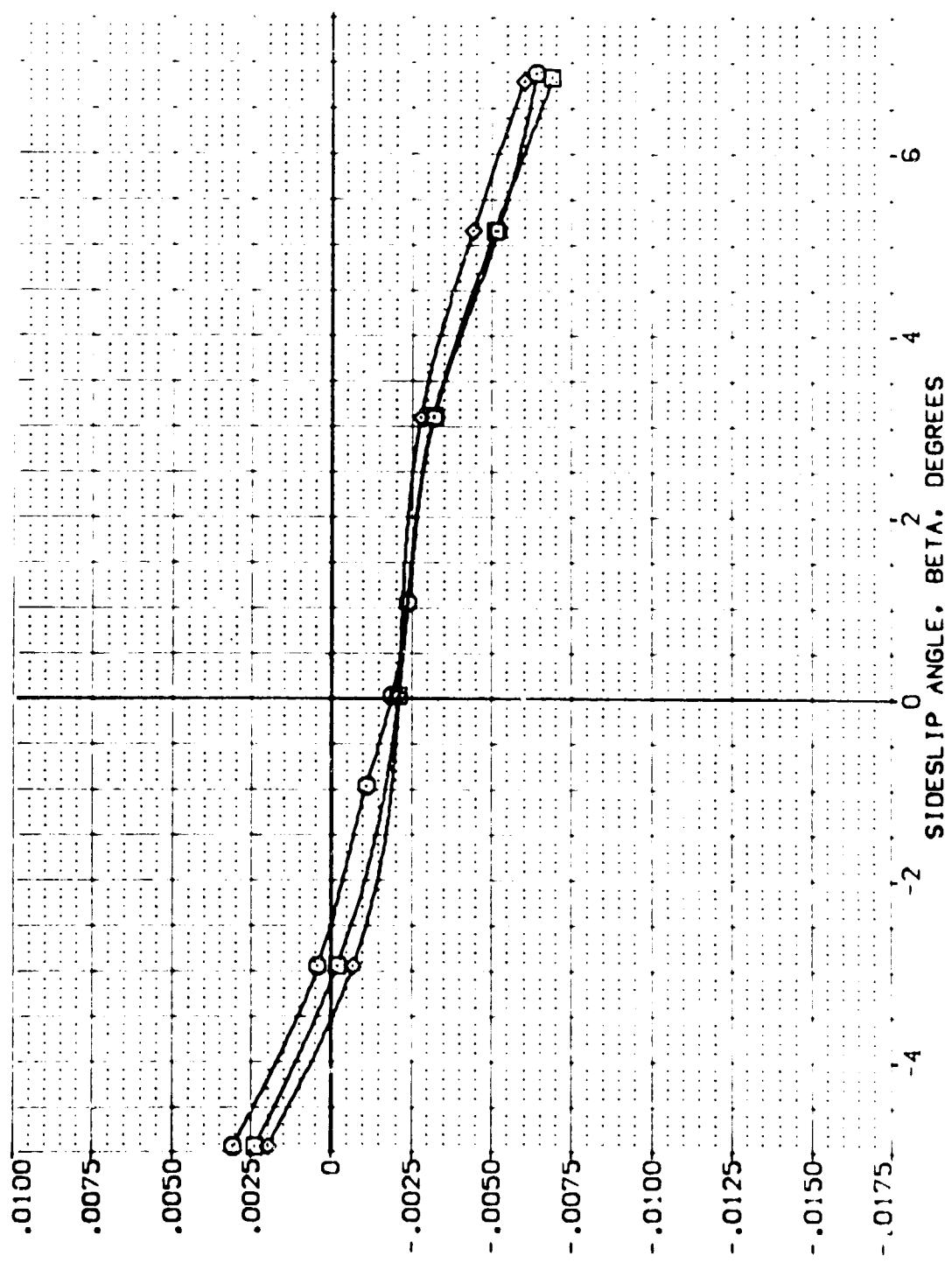


FIG. 25 SPEEDBRAKE EFFECTS

(A)MAC = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BD FLAP	SPOILER	REFERENCE INFORMATION
(AEJ012)	ARC 11-747 DAS3A B C H F VI V	.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(AEJ025)	ARC 11-747 DAS3A B C H F VI V	.000	.000	-11.700	55.000	LREF 14.2440 IN.
(AEJ038)	ARC 11-747 DAS3A B C H F VI V	.000	.000	-11.700	85.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

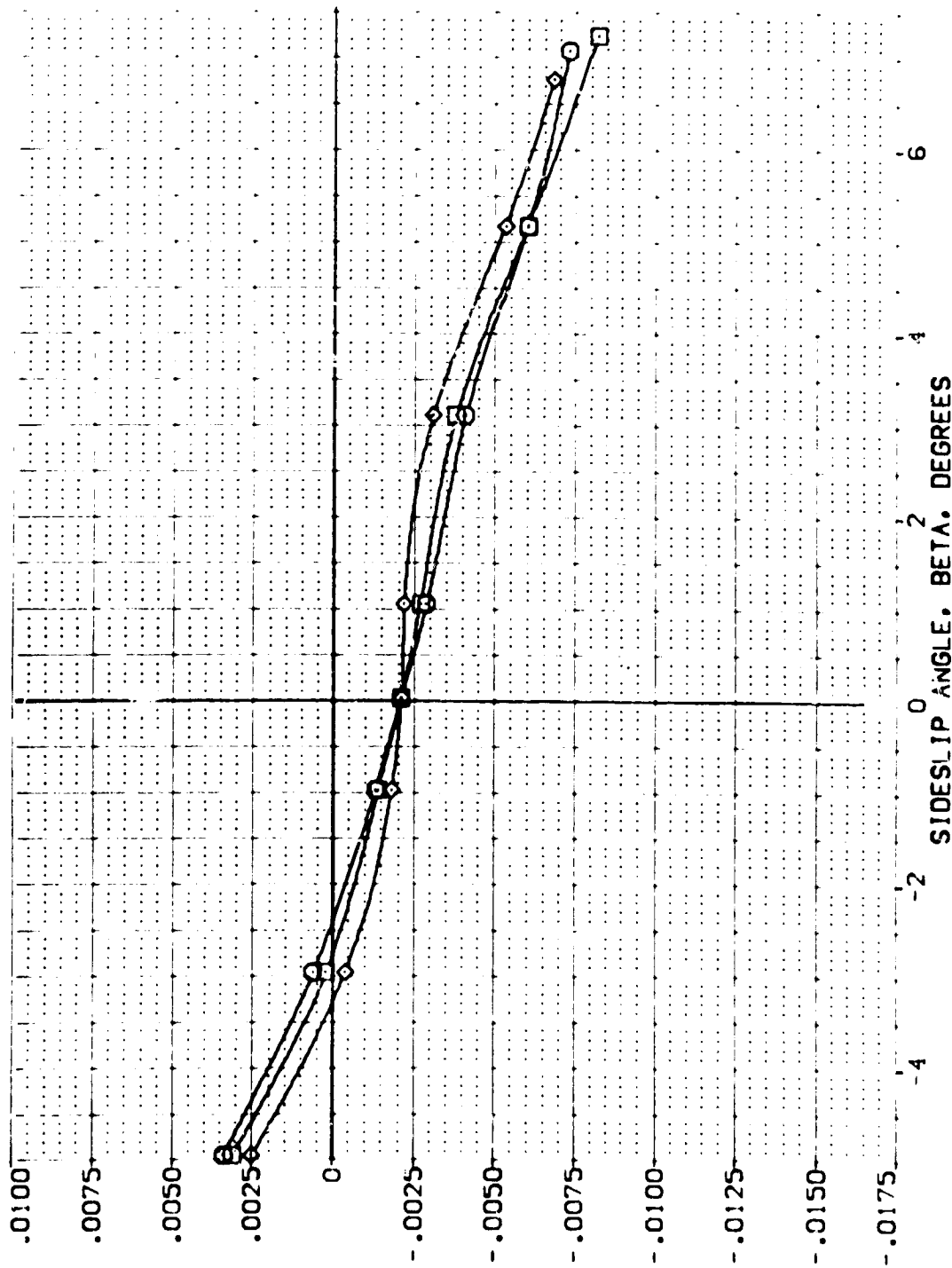


FIG. 25 SPEEDBRAKE EFFECTS

(B)MAC = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPEED	REFERENCE INFORMATION
[AEJ012]	ARC 11-747 OA53A B C H F VI V	.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[AEJ025]	ARC 11-747 OA53A B C H F VI V	.000	.000	-11.700	55.000	LREF 14.2440 IN.
[AEJ038]	ARC 11-747 OA53A B C H F VI V	.000	.000	-11.700	85.000	BREF 28.1004 IN.
						YMRP 32.3010 IN.
						ZMRP .0000 IN.
						SCALE 11.2500 IN.
						SCALE .0300

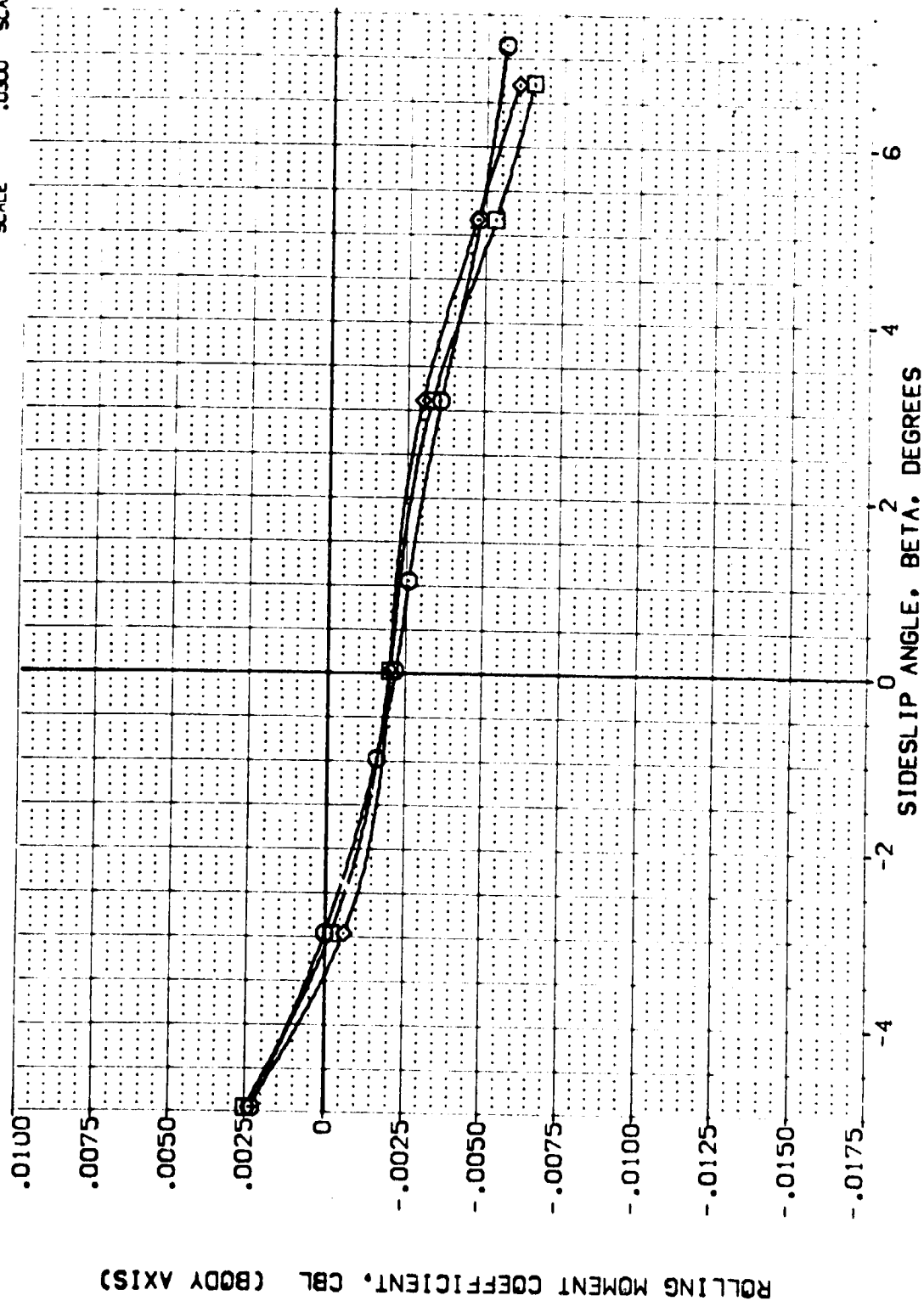


FIG. 25 SPEEDBRAKE EFFECTS

(C)MACH = .90



DATA SET SYMBOL: (AEJ012) (AEJ023) (AEJ039)

CONFIGURATION DESCRIPTION: ARC 11-747 DASSA B C M F VI V NOM: RV/L ARC 11-747 DASSA B C M F VI V NOM: RV/L ARC 11-747 DASSA B C M F VI V NOM: RV/L

ALPHA: .000 .000 .000

RUDER: .000 .000 .000

BOFLAP: -11.700 -11.700 -11.700

SPOBRK: 25.000 55.000 85.000

REFERENCE INFORMATION: SREF 2.4210 SQ.FT. LREF 14.2440 IN. BREF 28.1004 IN. XMRP 32.3010 IN. YMRP 0.0000 IN. ZMRP 11.2500 IN. SCALE .0300

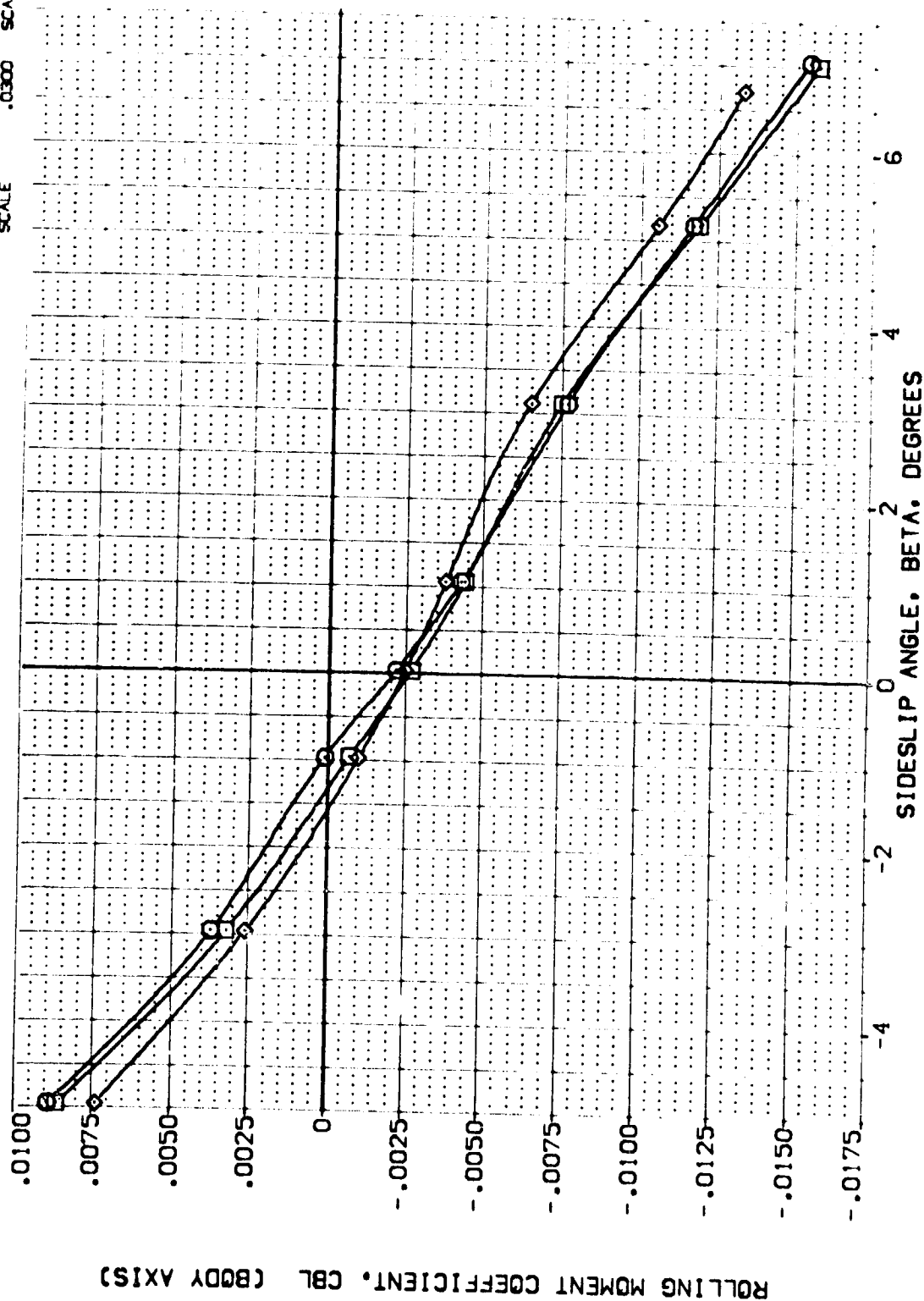


FIG. 25 SPEEDBRAKE EFFECTS

(O)MACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BD/LAP	SPOBRK	REFERENCE INFORMATION
{AEJ012}	ARC 11-747 DAS3A B C M F V1 V	.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
{AEJ025}	ARC 11-747 DAS3A B C M F V1 V	.000	.000	-11.700	55.000	LREF 14.2440 IN.
{AEJ038}	ARC 11-747 DAS3A B C M F V1 V	.000	.000	-11.700	85.000	BREF 28.1004 IN.
						XREF 32.3010 IN.
						YREF .0000 IN.
						ZREF 11.2500 IN.
						SCALE .0300

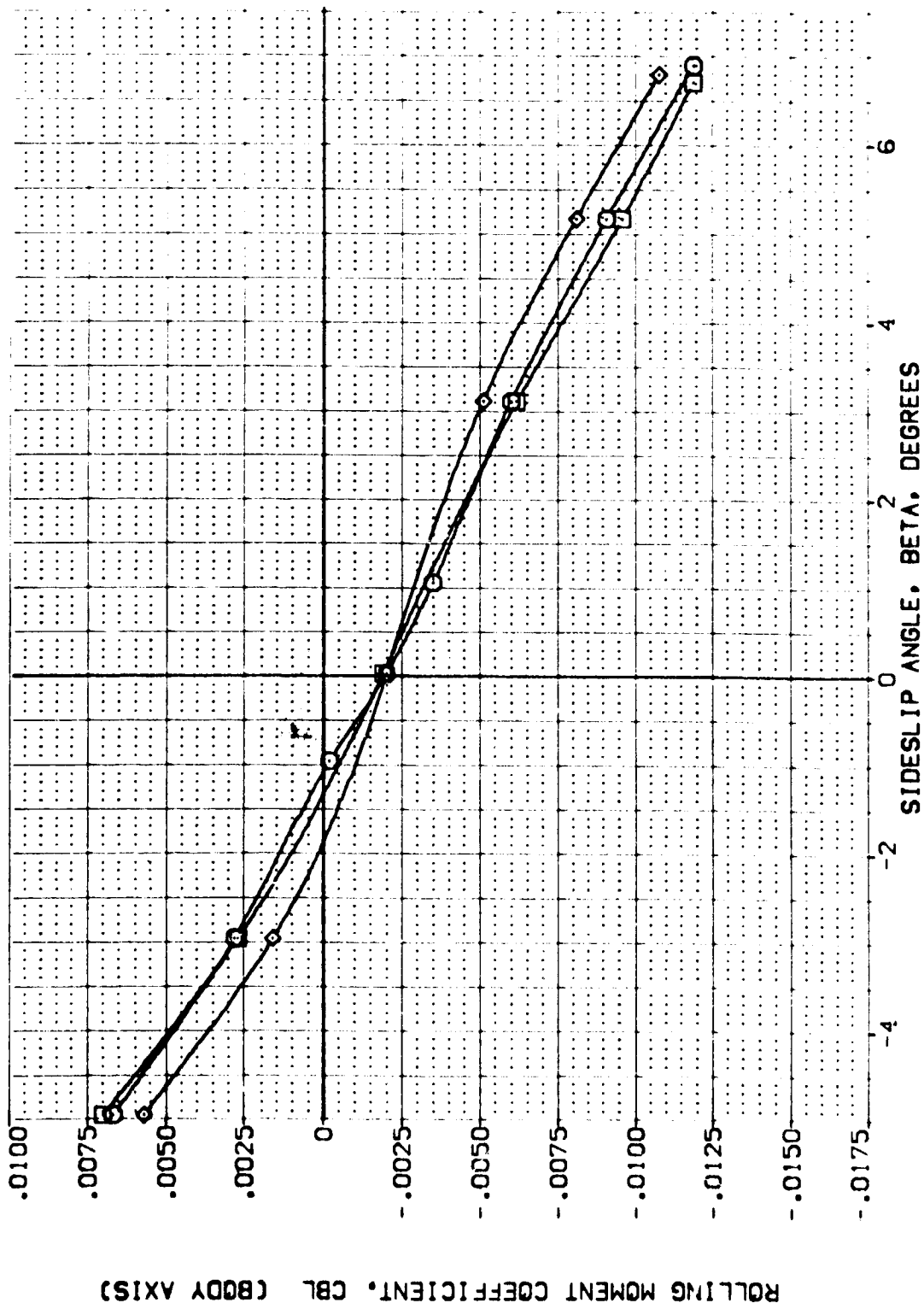


FIG. 25 SPEEDBRAKE EFFECTS

(E)MACH = 1.20

DATA SET SYMBOL CONFIGURATION DESCRIPTION

[AEJ013] ARC 11-747 DAS3A B C M F VI V NOM. RV/L

[AEJ026] ARC 11-747 DAS3A B C M F VI V NOM. RV/L

[AEJ040] ARC 11-747 DAS3A B C M F VI V NOM. RV/L

ALPHA 10.000  
10.000  
10.000

RUDDER .000  
.000  
.000

BOFLAP -11.700  
-11.700  
-11.700

SPOBRK 25.000  
55.000  
85.000

REFERENCE INFORMATION

SREF 2.4210 SQ.FT.

LREF 14.2440 IN.

BREF 28.1004 IN.

XMRP 32.3010 IN.

YMRP .0000 IN.

ZMRP 11.2500 IN.

SCALE .0300 IN.

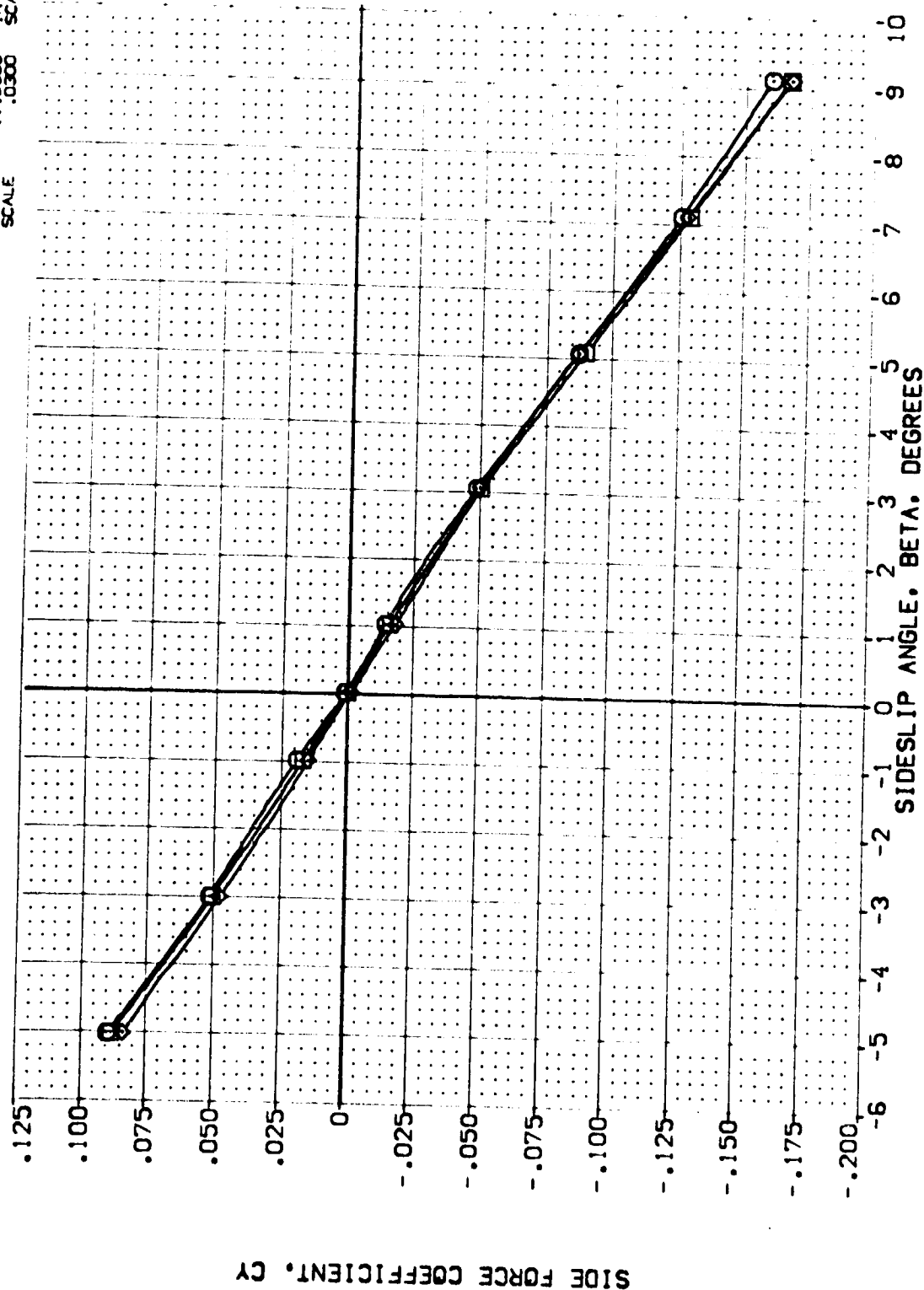


FIG. 25 SPEEDBRAKE EFFECTS

(A)MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPOBRK	REFERENCE INFORMATION
{ AEJ013 }	ARC 11-747 OAS3A B C H F VI V	10.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
{ AEJ026 }	ARC 11-747 OAS3A B C H F VI V	10.000	.000	-11.700	55.000	LREF 14.2440 IN.
{ AEJ040 }	ARC 11-747 OAS3A B C H F VI V	10.000	.000	-11.700	65.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

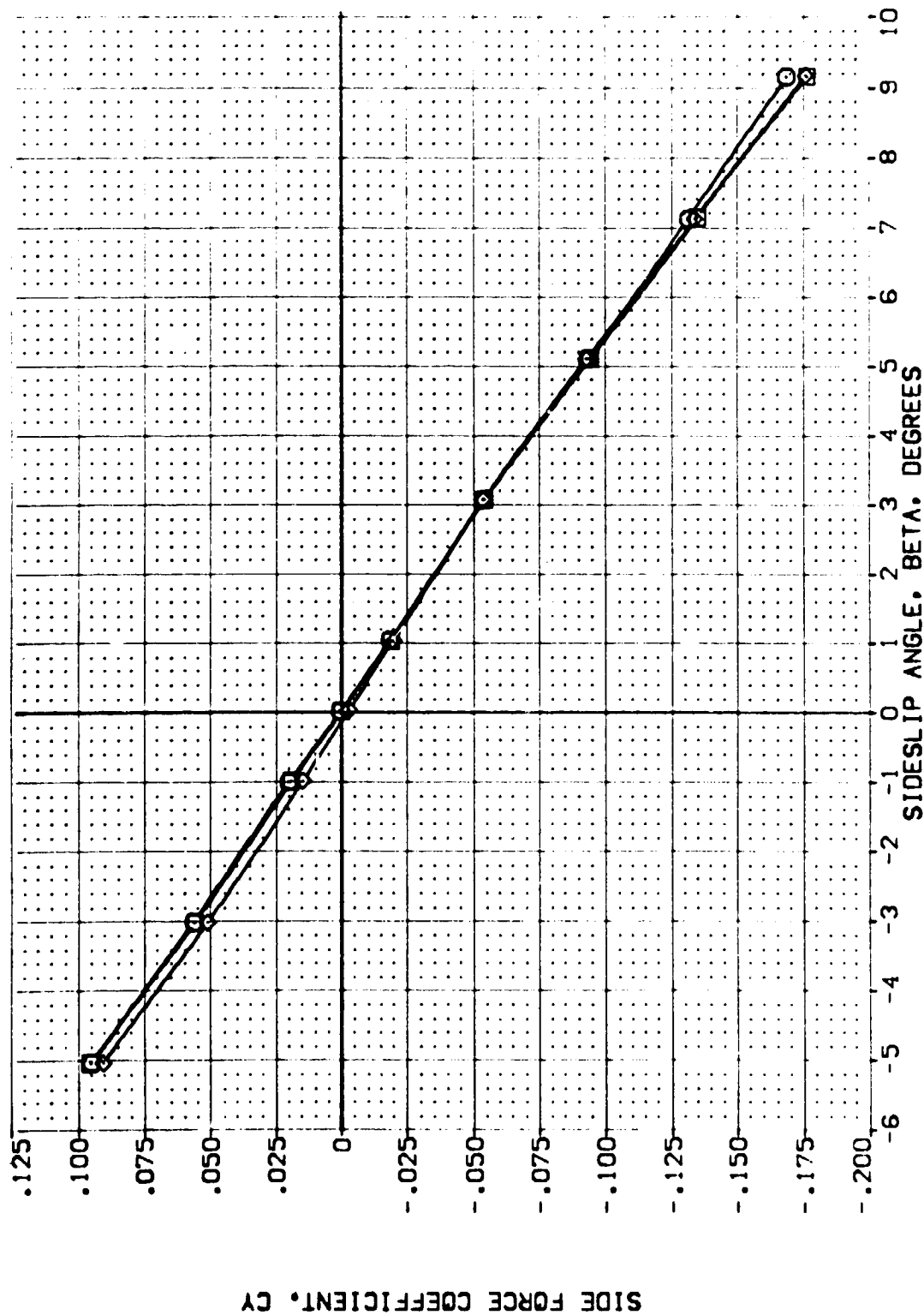


FIG. 25 SPEEDBRAKE EFFECTS

(B)MACH = .80

DATA SET SYMBO. CONFIGURATION DESCRIPTION

ARC	11-747	QAS3A	B	C	M	F	V	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
ARC	11-747	QAS3A	B	C	M	F	V	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100

REFERENCE INFORMATION

SRF	LRF	BRF	YMRP	ZMRP	SCALE
2.4210	14.2440	28.1004	32.3010	11.2500	.0300

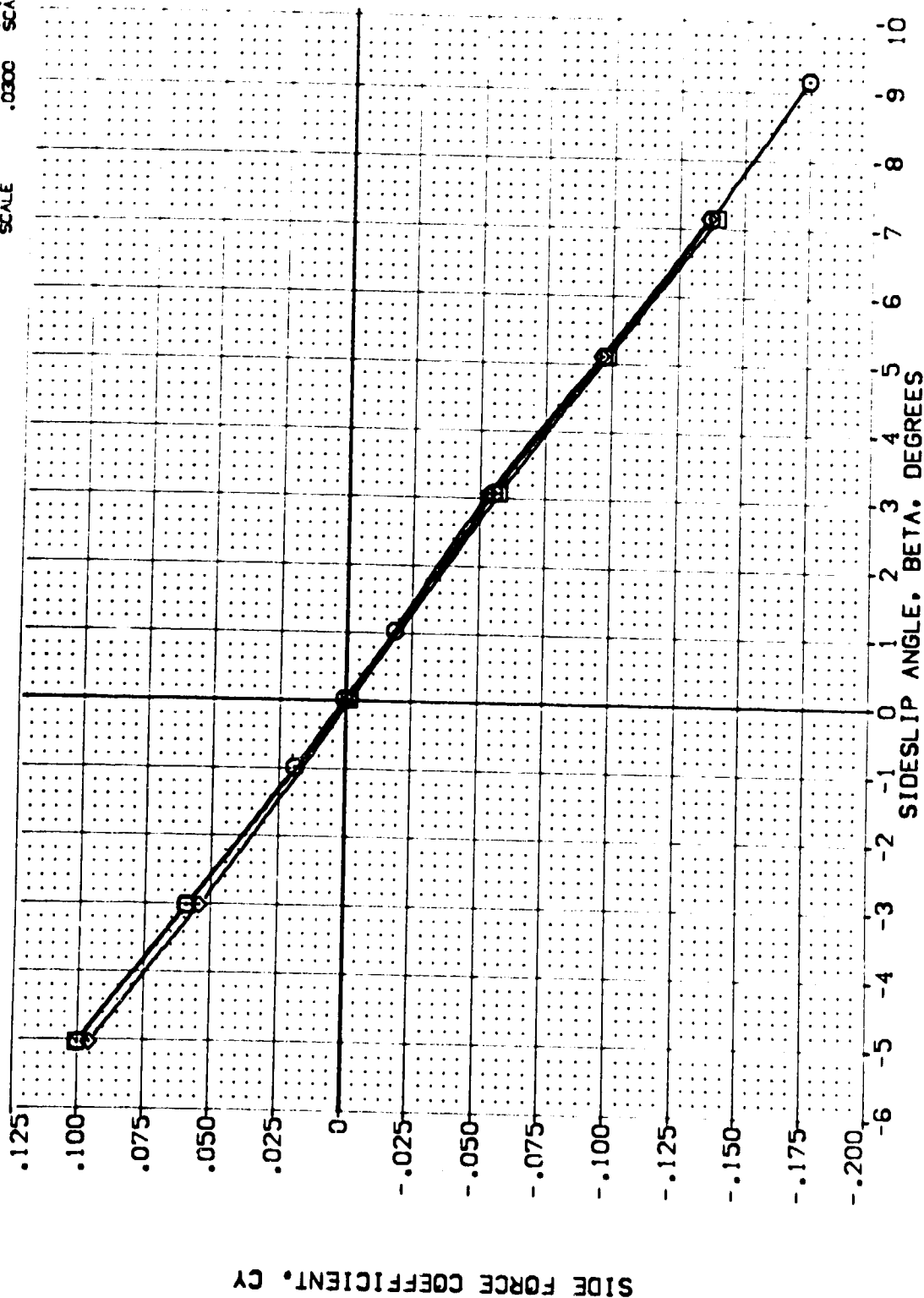


FIG. 25 SPEEDBRAKE EFFECTS

(C)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	FLUDER	BFLAP	SPOBRK	REFERENCE INFORMATION
[AEJ013]	ARC 11-747 0A53A B C H F VI V	10.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[AEJ026]	ARC 11-747 0A53A B C H F VI V	10.000	.000	-11.700	55.000	LREF 14.2440 IN.
[AEJ040]	ARC 11-747 0A53A B C H F VI V	10.000	.000	-11.700	85.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

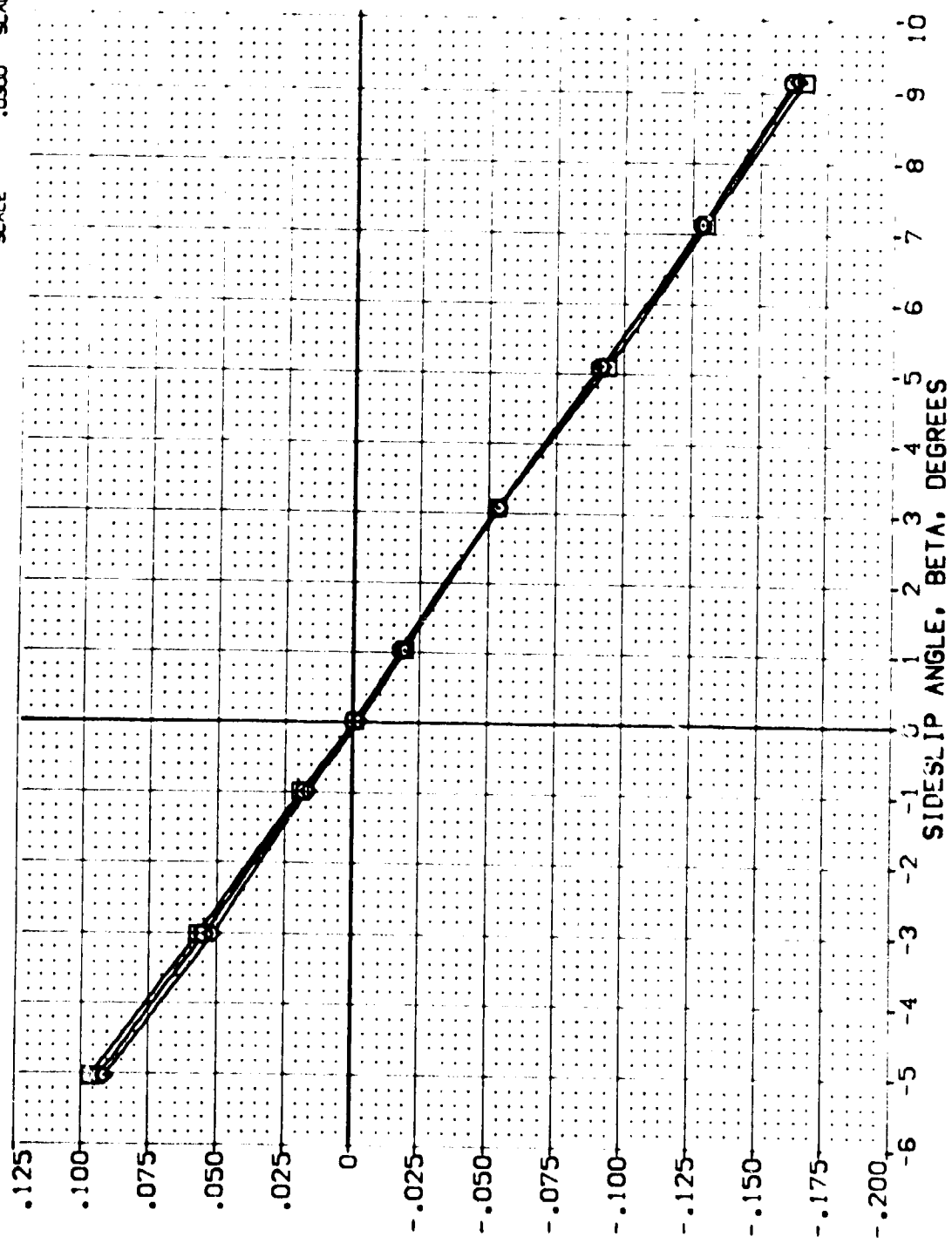


FIG. 25 SPEEDBRAKE EFFECTS

(0)MACH = 1.06

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BD FLAP	SPDBRK	REFERENCE INFORMATION
(AEJ013)	ARC 11-747 B453A B C M F VI V	10.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(AEJ026)	ARC 11-747 B453A B C M F VI V	10.000	.000	-11.700	55.000	LREF 14.2440 IN.
(AEJ040)	ARC 11-747 B453A B C M F VI V	10.000	.000	-11.700	85.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

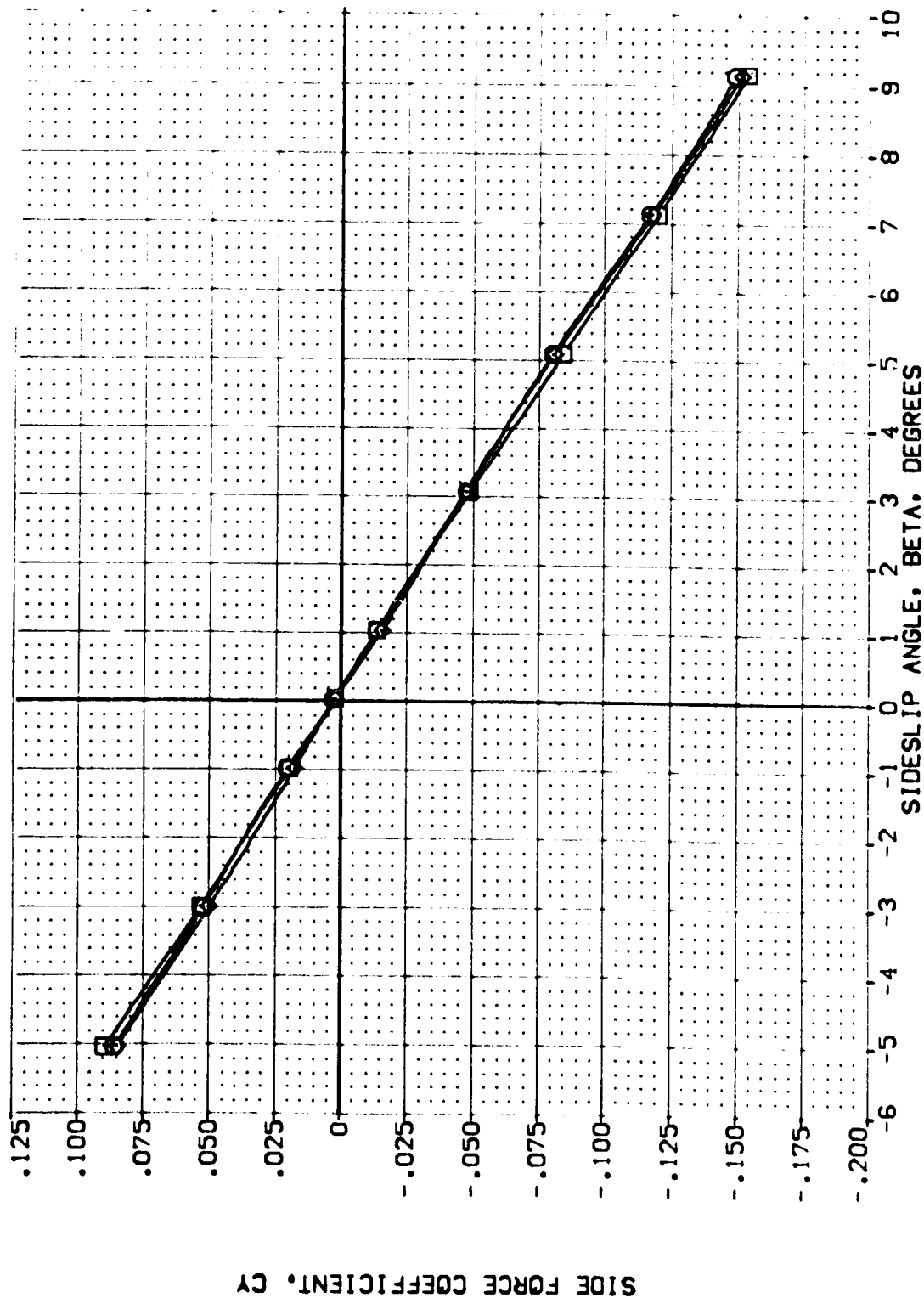


FIG. 25 SPEEDBRAKE EFFECTS

(E)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BD FLAP	SPOILER	REFERENCE INFORMATION
[AEJ013]	ARC 11-747 BAS3A B C M F V1 V	10.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[AEJ026]	ARC 11-747 BAS3A B C M F V1 V	10.000	.000	-11.700	55.000	LREF 14.2440 IN.
[AEJ040]	ARC 11-747 BAS3A B C M F V1 V	10.000	.000	-11.700	85.000	BREF 28.1004 IN.
						XREF 32.3010 IN.
						YREF 11.0000 IN.
						ZREF 11.2500 IN.
						SCALE .0000

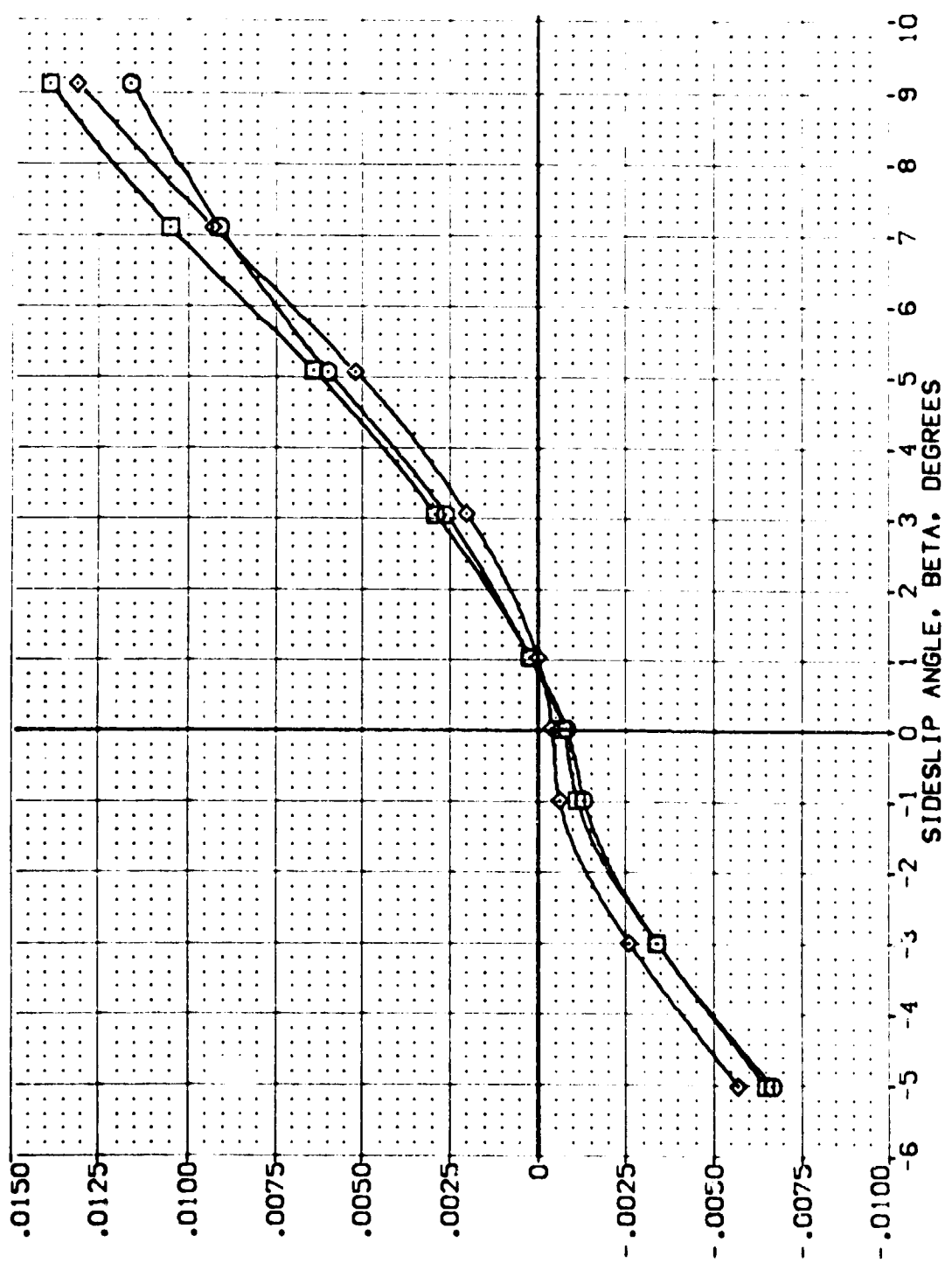


FIG. 25 SPEEDBRAKE EFFECTS

(A)MACH = .60



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPODBRK	REFERENCE INFORMATION
{AEJ013}	ARC 11-747 D453A B C M F VI V	10.000	.000	-11.700	25.000	SREF 2.4210 50.000
{AEJ026}	ARC 11-747 D453A B C M F VI V	10.000	.000	-11.700	55.000	LREF 14.2440 IN.
{AEJ040}	ARC 11-747 D453A B C M F VI V	10.000	.000	-11.700	65.000	BREF 28.1004 IN.
						YMRP 32.3010 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

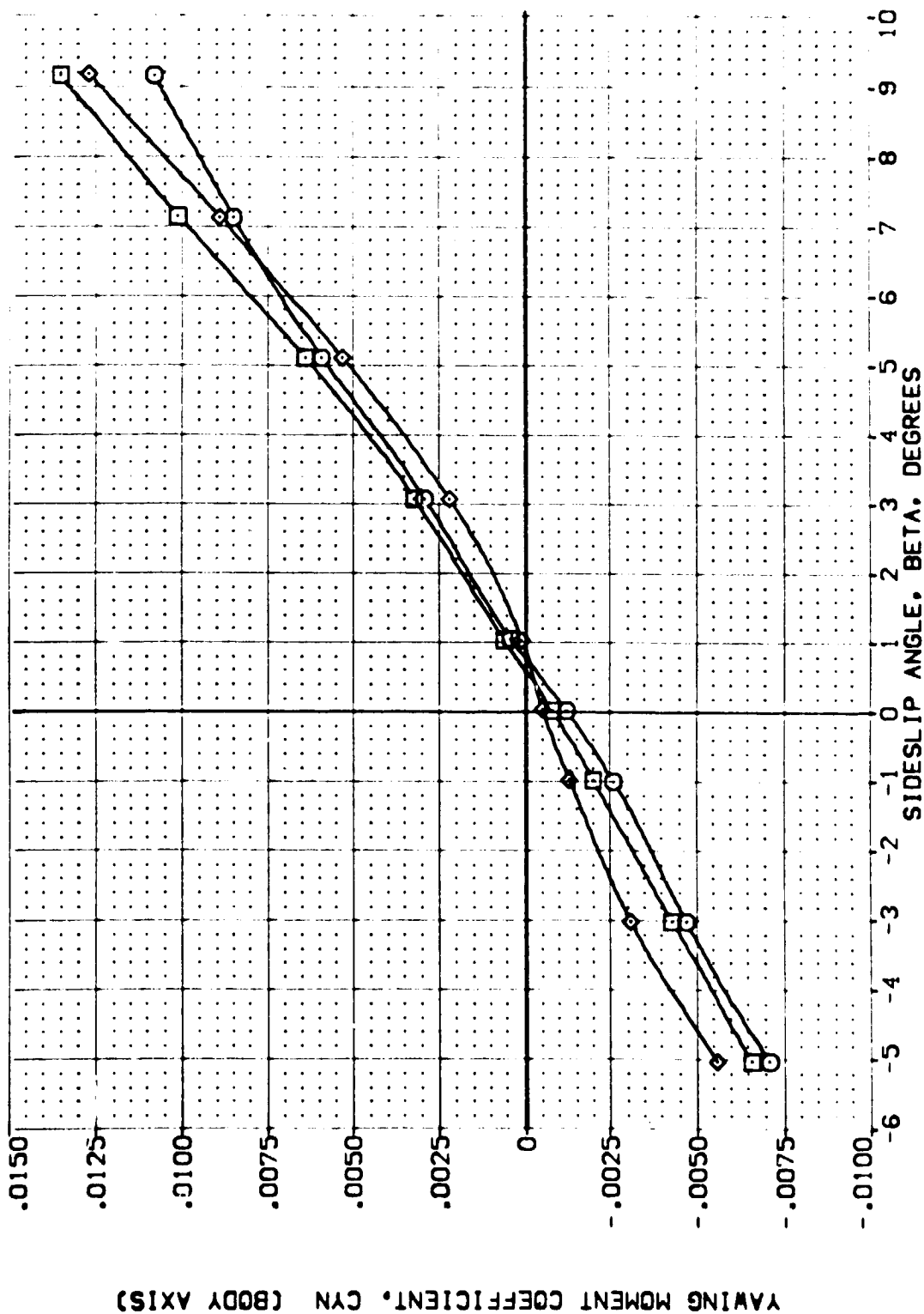


FIG. 25 SPEEDBRAKE EFFECTS

(B)MACH = .80

DATA SET SYMBOL		CONFIGURATION DESCRIPTION		ALPHA		RUDDER		BOLAP		SPOBRK		REFERENCE INFORMATION	
(AEJ013)	□	ARC 11-747	QAS3A B C M F VI V	10.000	.000	-11.700	25.000	SREF	2.4210	50.000	2.4210	50.000	
(AEJ026)	◇	ARC 11-747	QAS3A B C M F VI V	10.000	.000	-11.700	55.000	LREF	14.2440	IN.	14.2440	IN.	
(AEJ040)	◇	ARC 11-747	QAS3A B C M F VI V	10.000	.000	-11.700	85.000	BREF	28.1000	IN.	28.1000	IN.	
								XMRP	32.3010	IN.	32.3010	IN.	
								YMRP	.0000	IN.	.0000	IN.	
								ZMRP	11.2500	IN.	11.2500	IN.	
								SCALE	.0300	SCALE	.0300	SCALE	

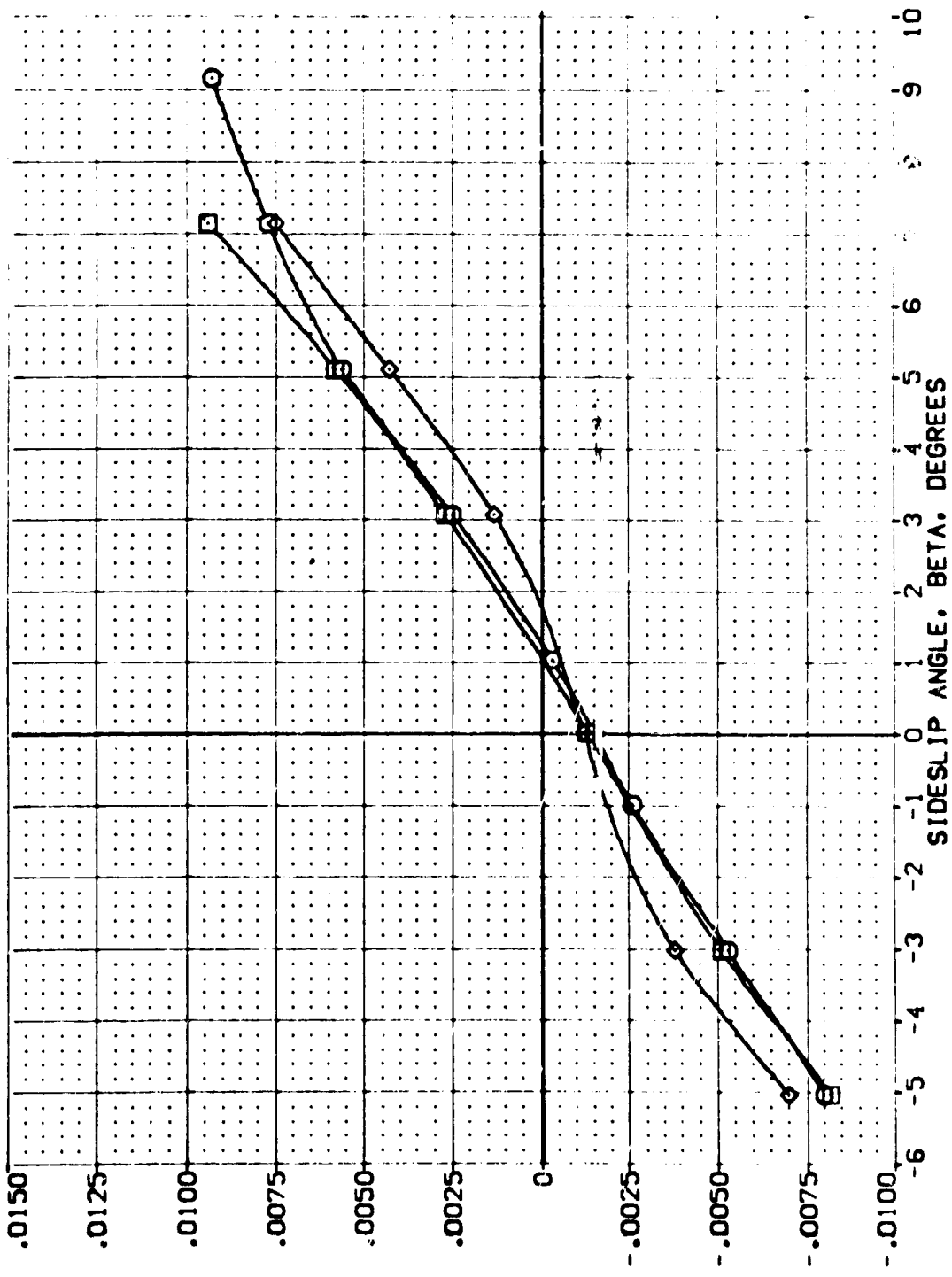


FIG. 25 SPEEDBRAKE EFFECTS  
(C)MACH = .90

DATA SET SYMBOL    CONFIGURATION DESCRIPTION    ALPHA    RUDDER    BOFLAP    SPEEDBRAKES    REFERENCE INFORMATION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPEEDBRAKES	REFERENCE INFORMATION
(AEJ013)	ARC 11-747 BASSA B C M F VI	10.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(AEJ026)	ARC 11-747 BASSA B C M F VI	10.000	.000	-11.700	35.000	LREF 14.2440 IN.
(AEJ040)	ARC 11-747 BASSA B C M F VI	10.000	.000	-11.700	85.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

YAWING MOMENT COEFFICIENT, CYN (BODY AXIS)

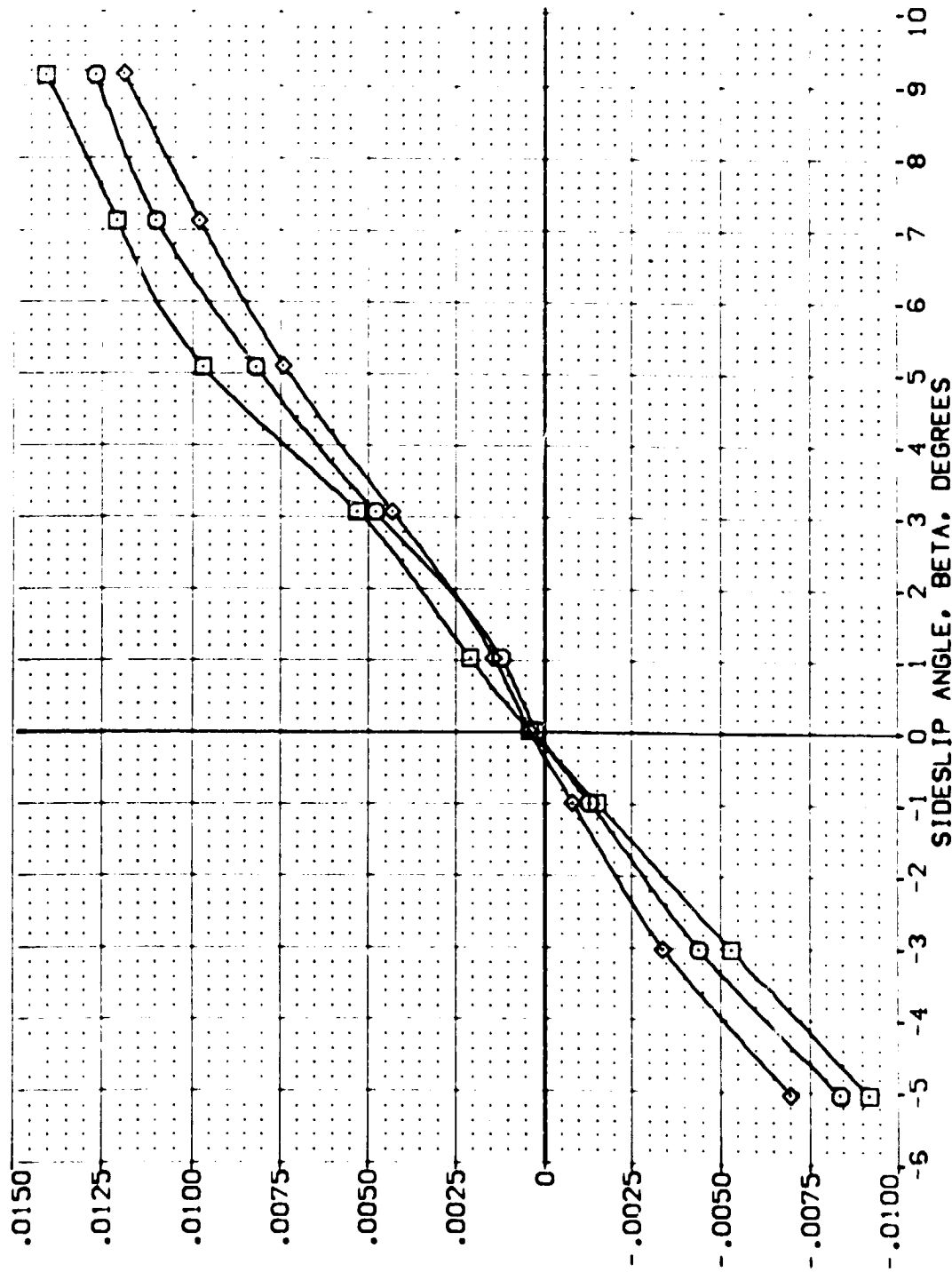


FIG. 25 SPEEDBRAKE EFFECTS

(O)MACH = 1.06

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BDFLAP	SPEEDBRAKE	REFERENCE IN ORINATION
[AEJ013]	ARC 11-747 DASJA B C H F VI	10.000	.000	-11.700	25.000	SREF 2.42 0 50.FT.
[AEJ016]	ARC 11-747 DASJA B C H F VI	10.000	.000	-11.700	55.000	LREF 14.2410 IN.
[AEJ040]	ARC 11-747 DASJA B C H F VI	10.000	.000	-11.700	65.000	BREF 28.100 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

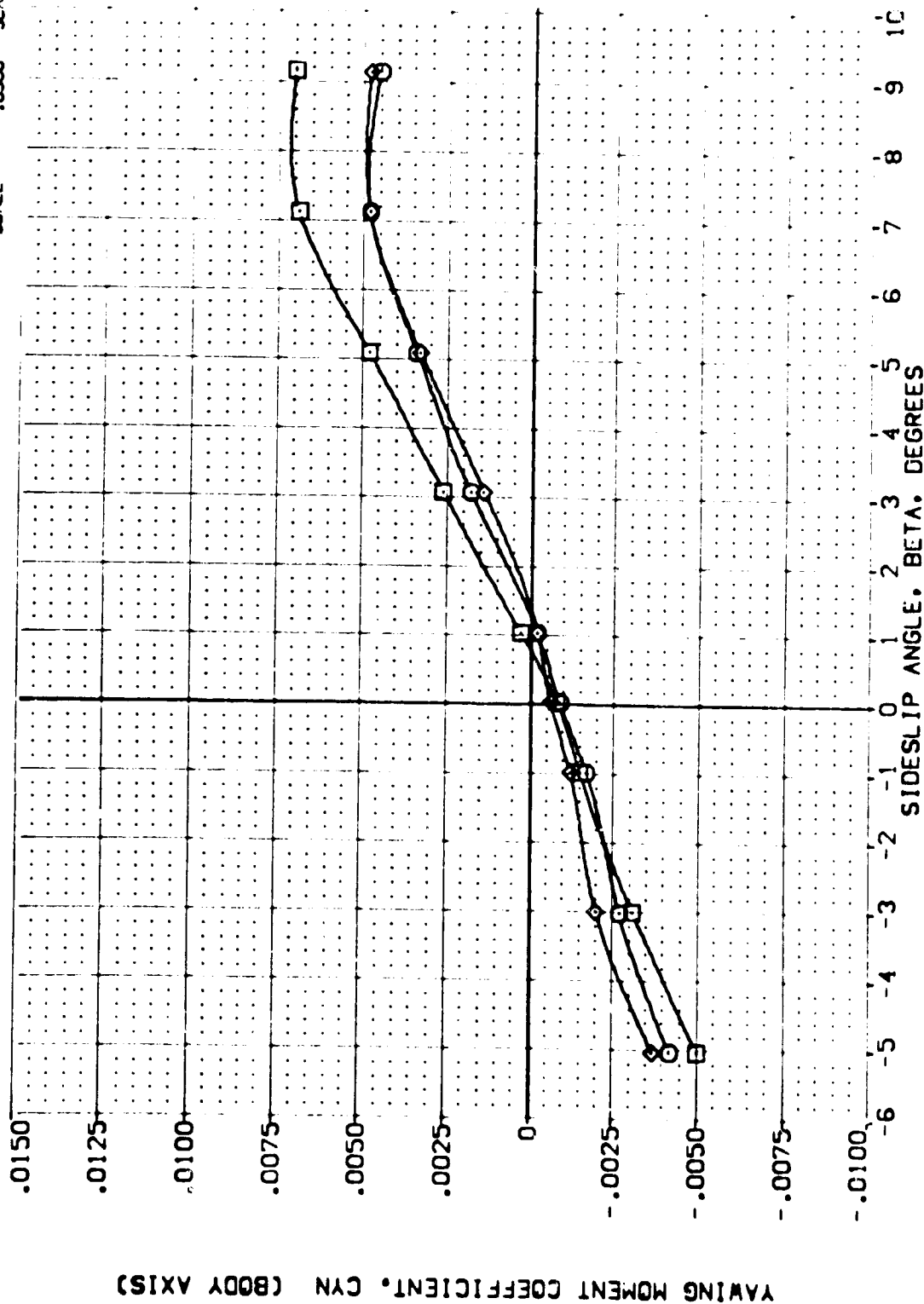


FIG. 25 SPEEDBRAKE EFFECTS

(E)MACH = 1.20

DATA SET SYMBOL: [AEJ013] [AEJ026] [AEJ040]

CONFIGURATION DESCRIPTION: ARC 11-747 BA53A B C M F VI V NOM: RV/L  
 ARC 11-747 BA53A B C M F VI V NOM: RV/L  
 ARC 11-747 BA53A B C M F VI V NOM: RV/L

ALPHA: 10.000 10.000 10.000

RUDER: .000 .000 .000

BDFLAP: -11.700 -11.700 -11.700

SPOBRK: 25.000 55.000 85.000

REFERENCE INFORMATION: SREF 2.4.10 SQ.FT.  
 LREF 14.2440 IN.  
 BREF 28.1004 IN.  
 YMRP 32.3010 IN.  
 ZMRP .0000 IN.  
 SCALE 11.2500 IN.  
 .0300 SCALE

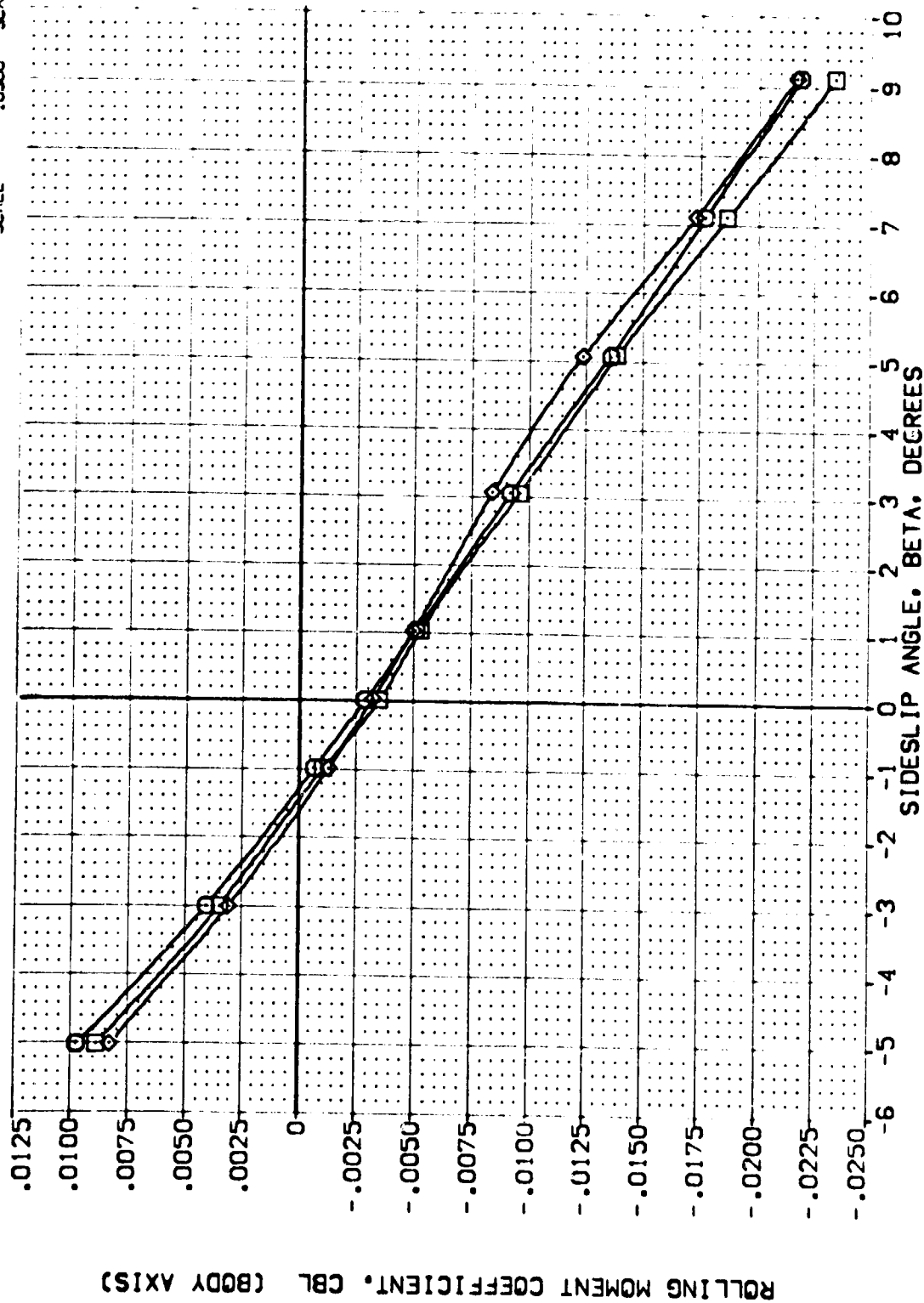


FIG. 25 SPEEDBRAKE EFFECTS

(A)MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDER	BDFLAP	SPOBRK	REFERENCE INFORMATION
(AE1012)	ARC 11-747 BA53A B C H F VI V	10.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(AE1026)	ARC 11-747 BA53A B C H F VI V	10.000	.000	-11.700	25.000	LREF 14.2440 IN.
(AE1040)	ARC 11-747 BA53A B C H F VI V	10.000	.000	-11.700	25.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

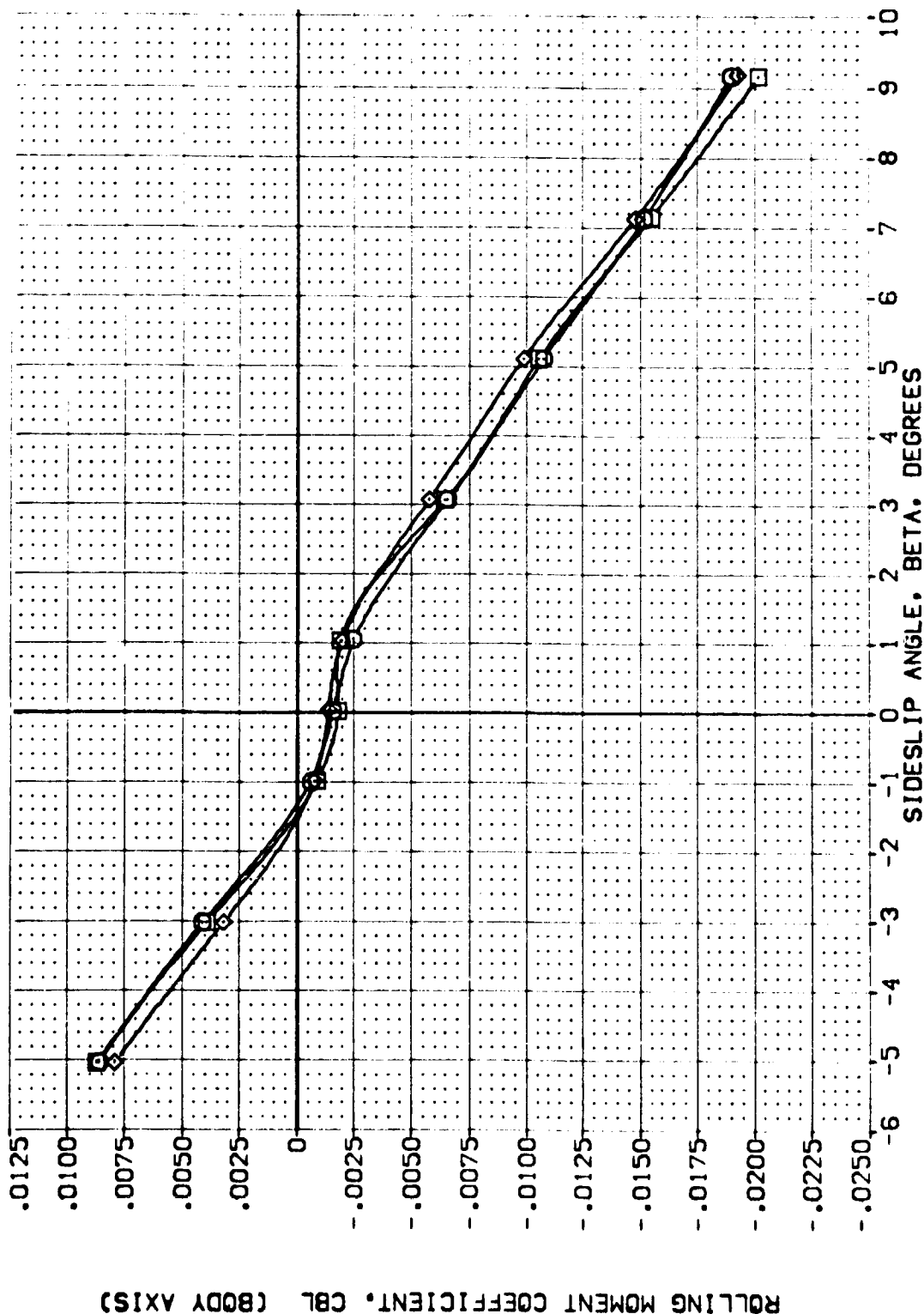


FIG. 25 SPEEDBRAKE EFFECTS

(B)MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPOBRK	REFERENCE INFORMATION
(AEJ013)	ARC 11-747 DAS3A B C H F VI	10.000	.000	-11.700	25.000	SREF 2.4210 50.57.
(AEJ026)	ARC 11-747 DAS3A B C H F VI	10.000	.000	-11.700	55.000	LREF 14.2440 IN.
(AEJ040)	ARC 11-747 DAS3A B C H F VI	10.000	.000	-11.700	61.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

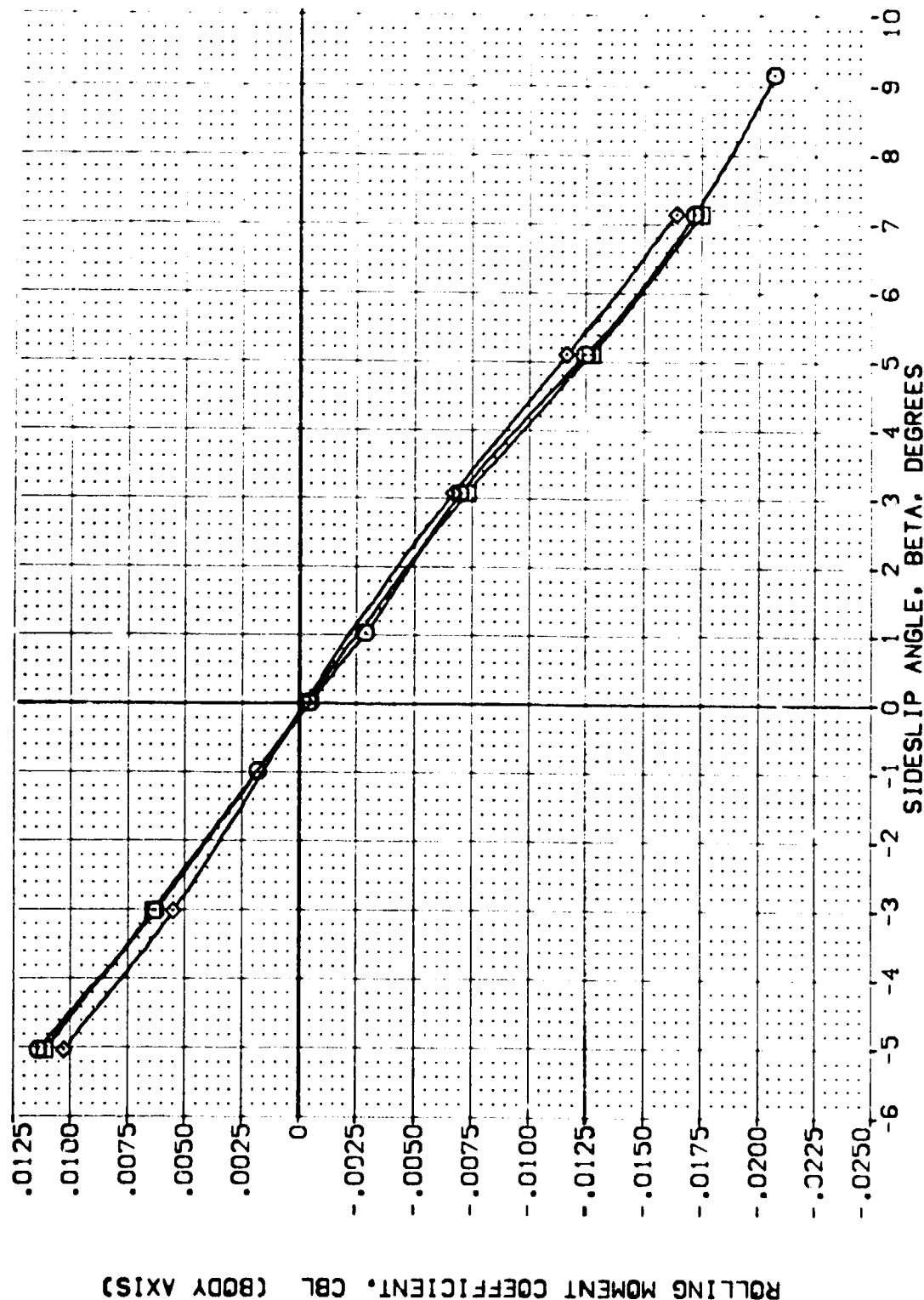


FIG. 25 SPEEDBRAKE EFFECTS

(C)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPOBRK	REFERENCE INFORMATION
(AEJ013)	ARC 11-747 OAS3A B C M F VI V	10.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(AEJ026)	ARC 11-747 OAS3A B C M F VI V	10.000	.000	-11.700	55.000	LREF 14.2440 IN.
(AEJ040)	ARC 11-747 OAS3A B C M F VI V	10.000	.000	-11.700	65.000	BREF 28.1004 IN.
						YMRP 32.3010 IN.
						ZMRP .0000 IN.
						SCALE 11.2500 IN.
						SCALE .0300

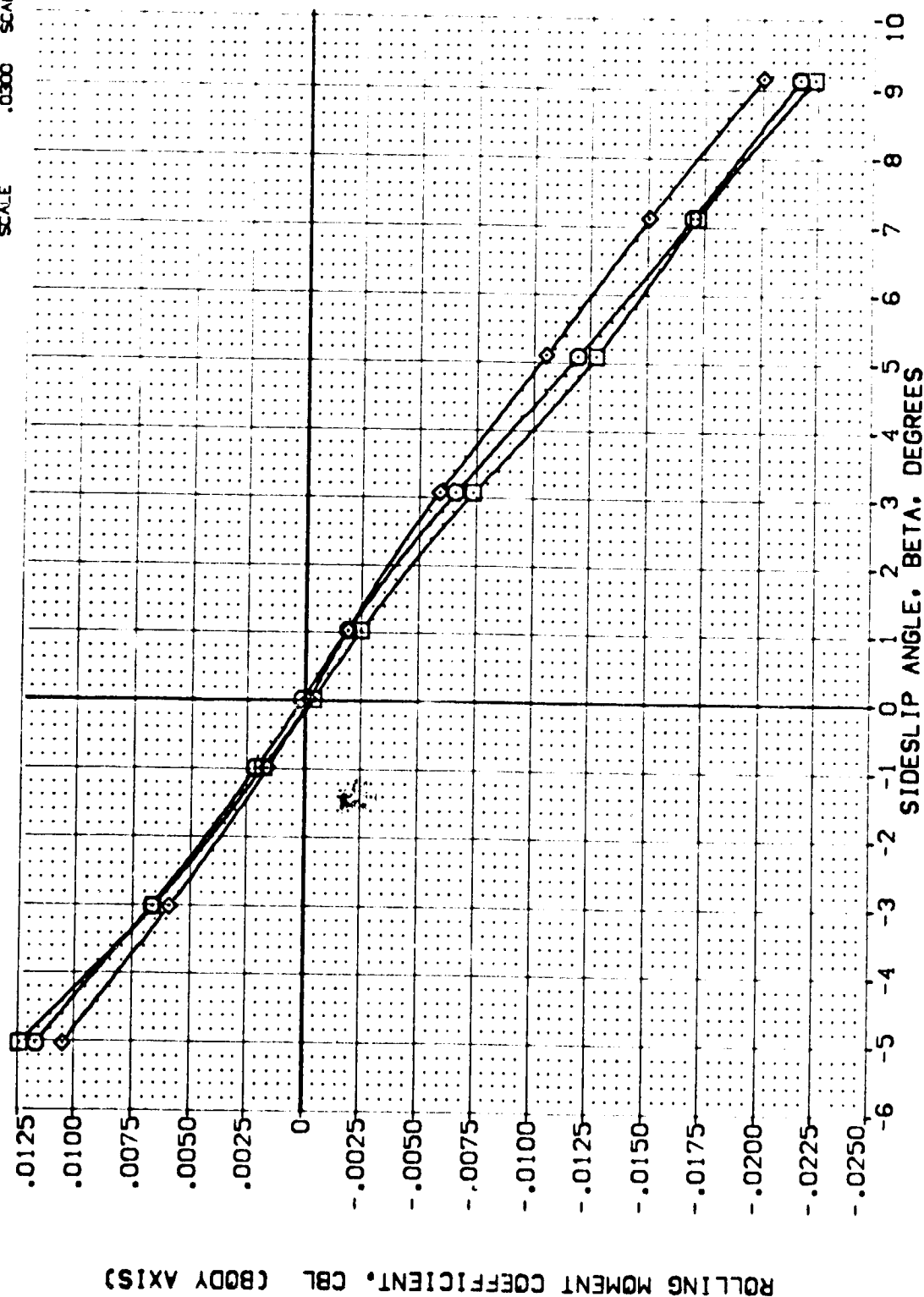


FIG. 25 SPEEDBRAKE EFFECTS

(C)MACH = 1.06



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BD FLAP	SPODBRK	REFERENCE INFORMATION
(AEJ013)	ARC 11-747 DA53A B C H F V1 V	10.000	.000	-11.700	25.000	SREF 2.4210 60. FT.
(AEJ026)	ARC 11-747 DA53A B C H F V1 V	10.000	.000	-11.700	53.000	LREF 14.2440 IN.
(AEJ040)	ARC 11-747 DA53A B C H F V1 V	10.000	.000	-11.700	65.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

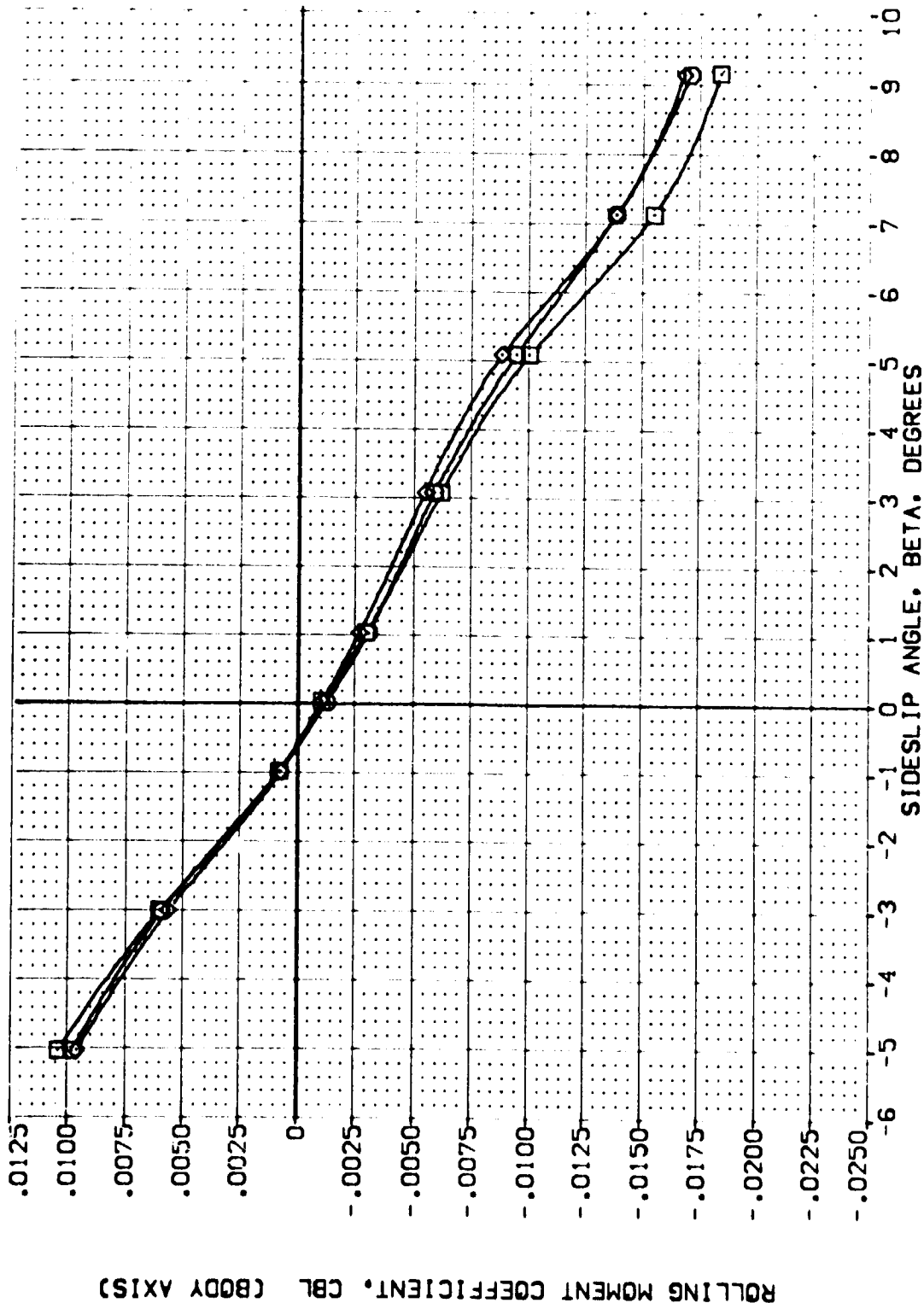


FIG. 25 SPEEDBRAKE EFFECTS

(E)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPEEDBRAKES	REFERENCE INFORMATION
[AEJ014]	ARC 11-747 OAS3A B C M F VI	20.000	.000	-11.700	25.000	SREF 2.4210 50. FT.
[AEJ027]	ARC 11-747 OAS3A B C M F VI	20.000	.000	-11.700	55.000	LREF 14.2440 IN.
[AEJ041]	ARC 11-747 OAS3A B C M F VI	20.000	.000	-11.700	65.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

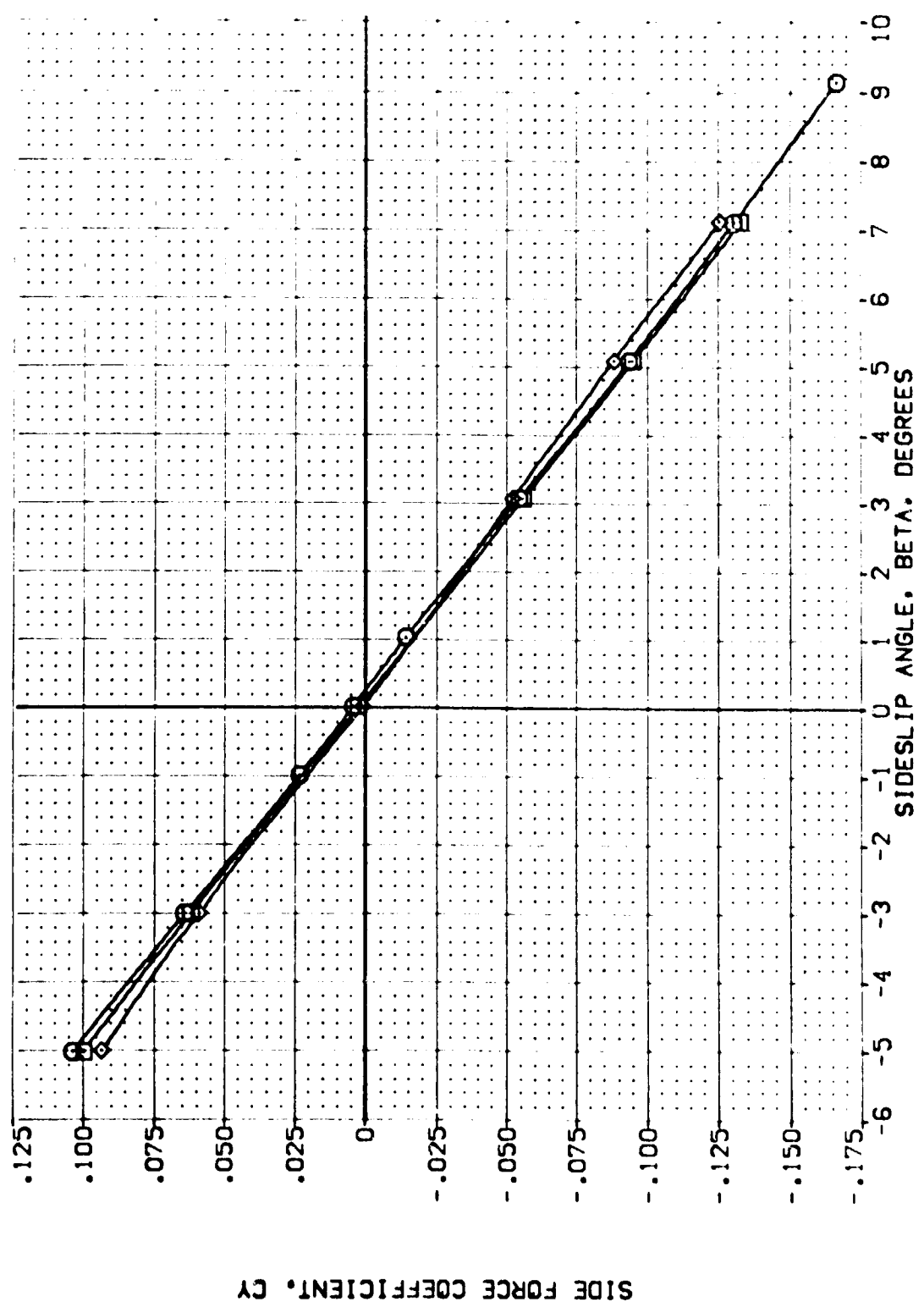


FIG. 25 SPEEDBRAKE EFFECTS

(A)  $Mach = 0.60$

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPOBRK	REFERENCE INFORMATION
{ AEJ014 }	ARC 11-747 DA53A B C M F VI V	20.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
{ AEJ027 }	ARC 11-747 DA53A B C M F VI V	20.000	.000	-11.700	55.000	LREF 14.2440 IN.
{ AEJ041 }	ARC 11-747 DA53A B C M F VI V	20.000	.000	-11.700	85.000	BREF 28.1004 IN.
						YMRP 3.3010 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

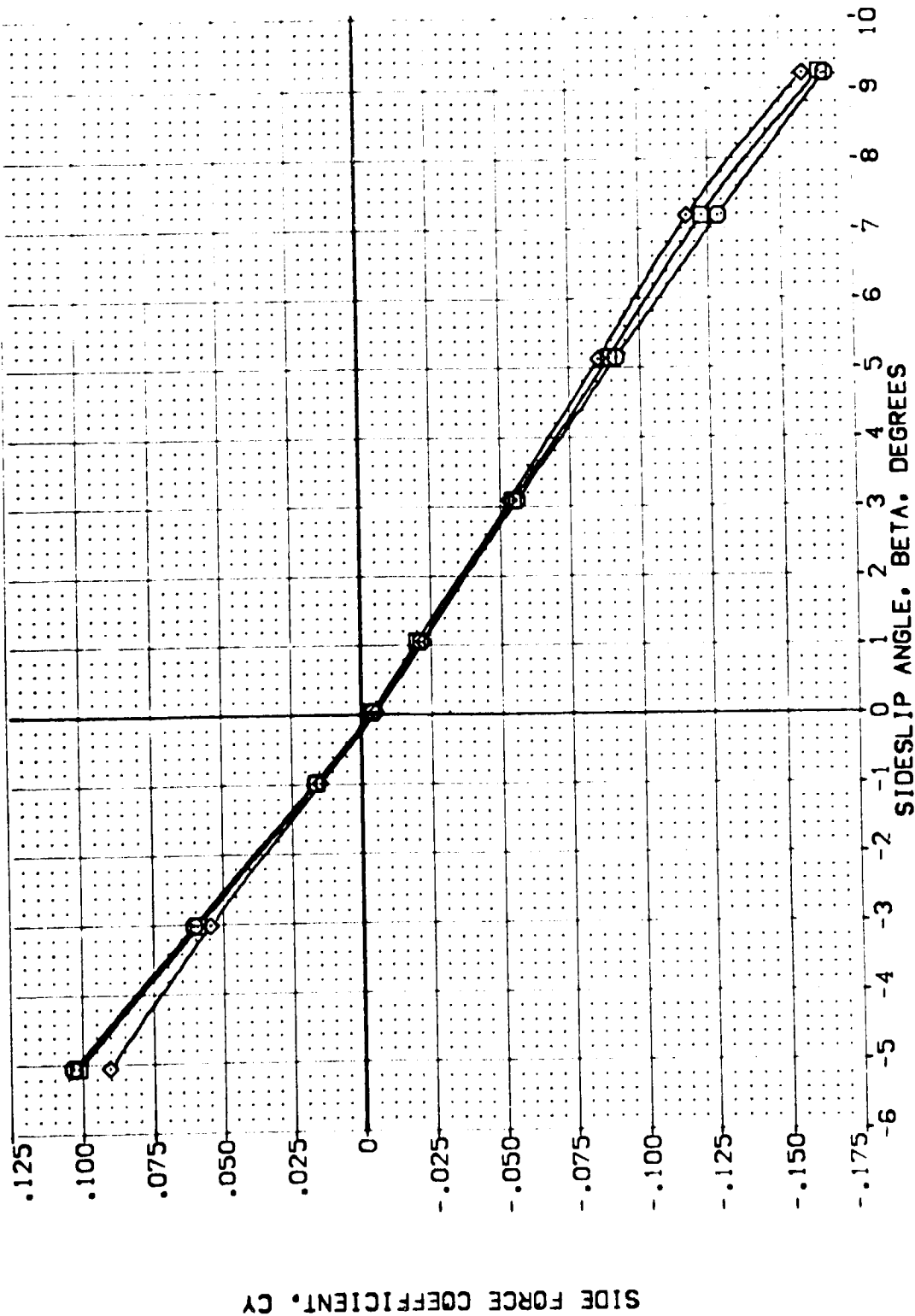


FIG. 25 SPEEDBRAKE EFFECTS

(B)MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPODBK	REFERENCE INFORMATION
{AEJ014}	ARC 11-747 DASSA B C M F VI	20.000	.000	-11.700	25.000	SREF 2.4210 50. FT.
{AEJ077}	ARC 11-747 DASSA B C M F VI	20.000	.000	-11.700	55.000	LREF 14.2440 IN.
{AEJ041}	ARC 11-747 DASSA B C M F VI	20.000	.000	-11.700	65.000	BREF 28.1004 IN.
						YMRP 32.3010 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

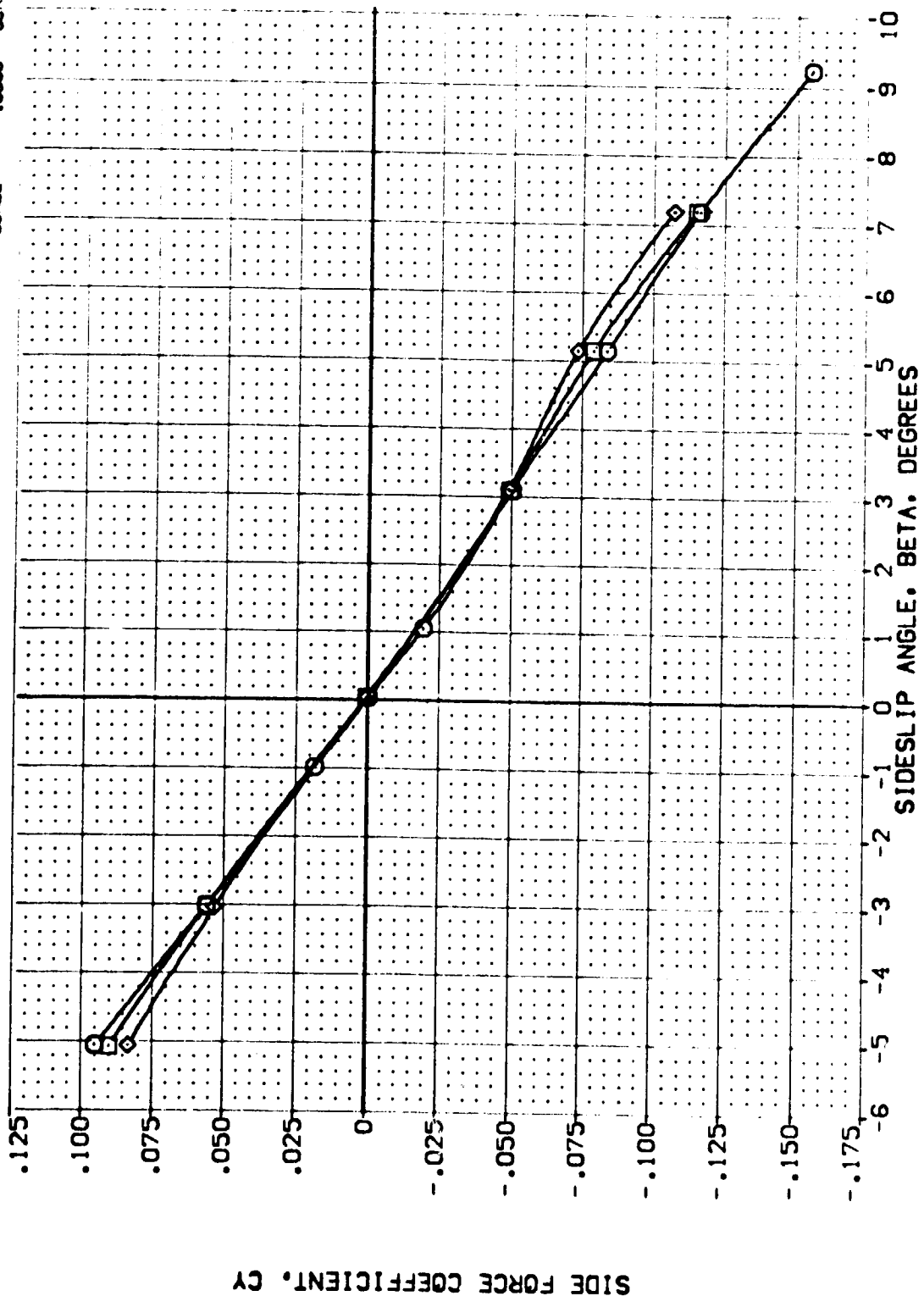


FIG. 25 SPEEDBRAKE EFFECTS

(C)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	%DBRK	REFERENCE INFORMATION
(AEJ014)	ARC 11-747 DAS3A B C M F VI V	20.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(AEJ027)	ARC 11-747 DAS3A B C M F VI V	20.000	.000	-11.700	55.000	LREF 14.2440 IN.
(AEJ041)	ARC 11-747 DAS3A B C M F VI V	20.000	.000	-11.700	65.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

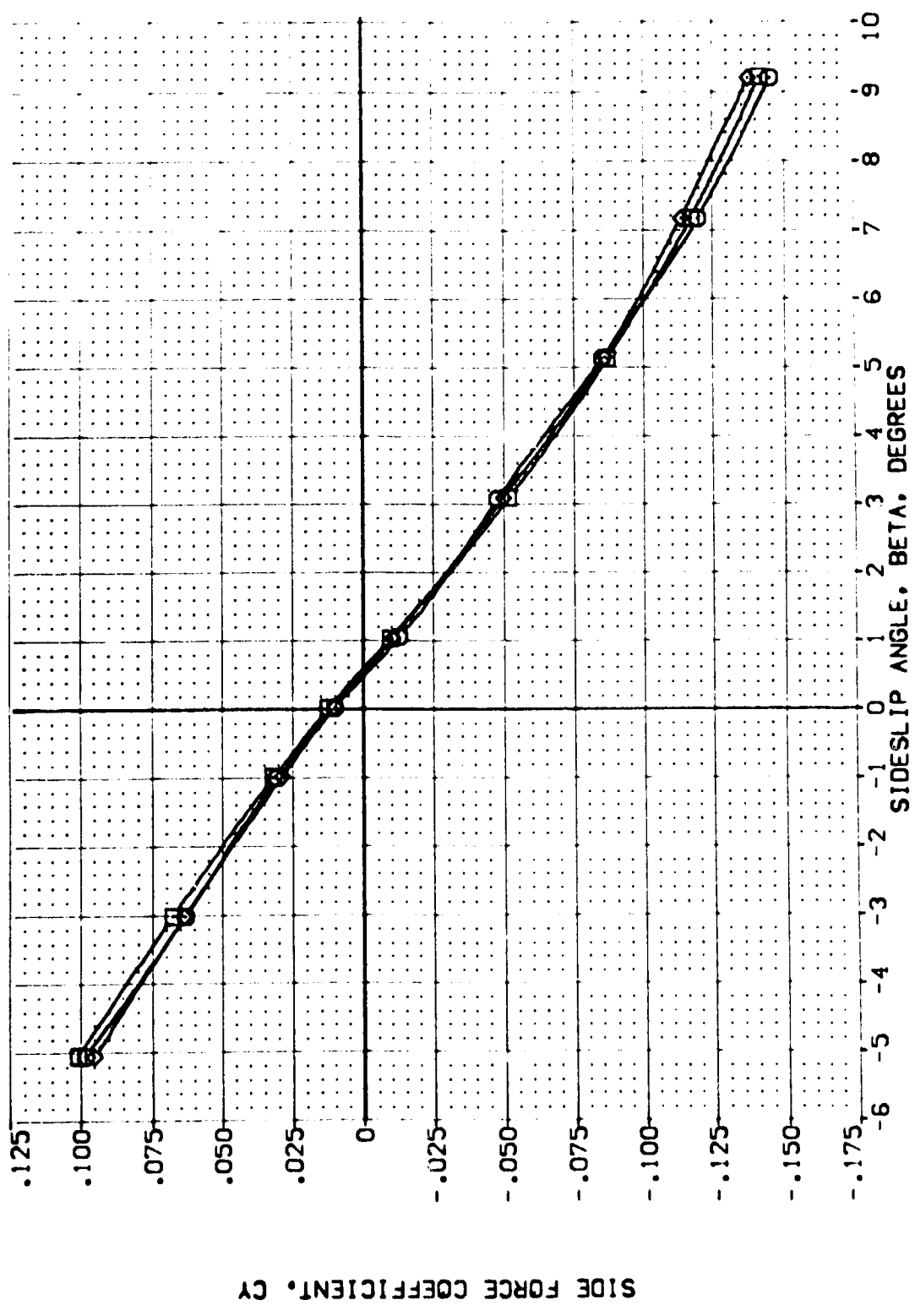


FIG. 25 SPEEDBRAKE EFFECTS

(O)MAC = 1.06

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPEEDK	REFERENCE INFORMATION
[AEJ014]	ARC 11-747 BA53A B C M F VI V	20.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[AEJ027]	ARC 11-747 BA53A B C M F VI V	20.000	.000	-11.700	55.000	LREF 14.2440 IN.
[AEJ041]	ARC 11-747 BA53A B C M F VI V	20.000	.000	-11.700	85.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

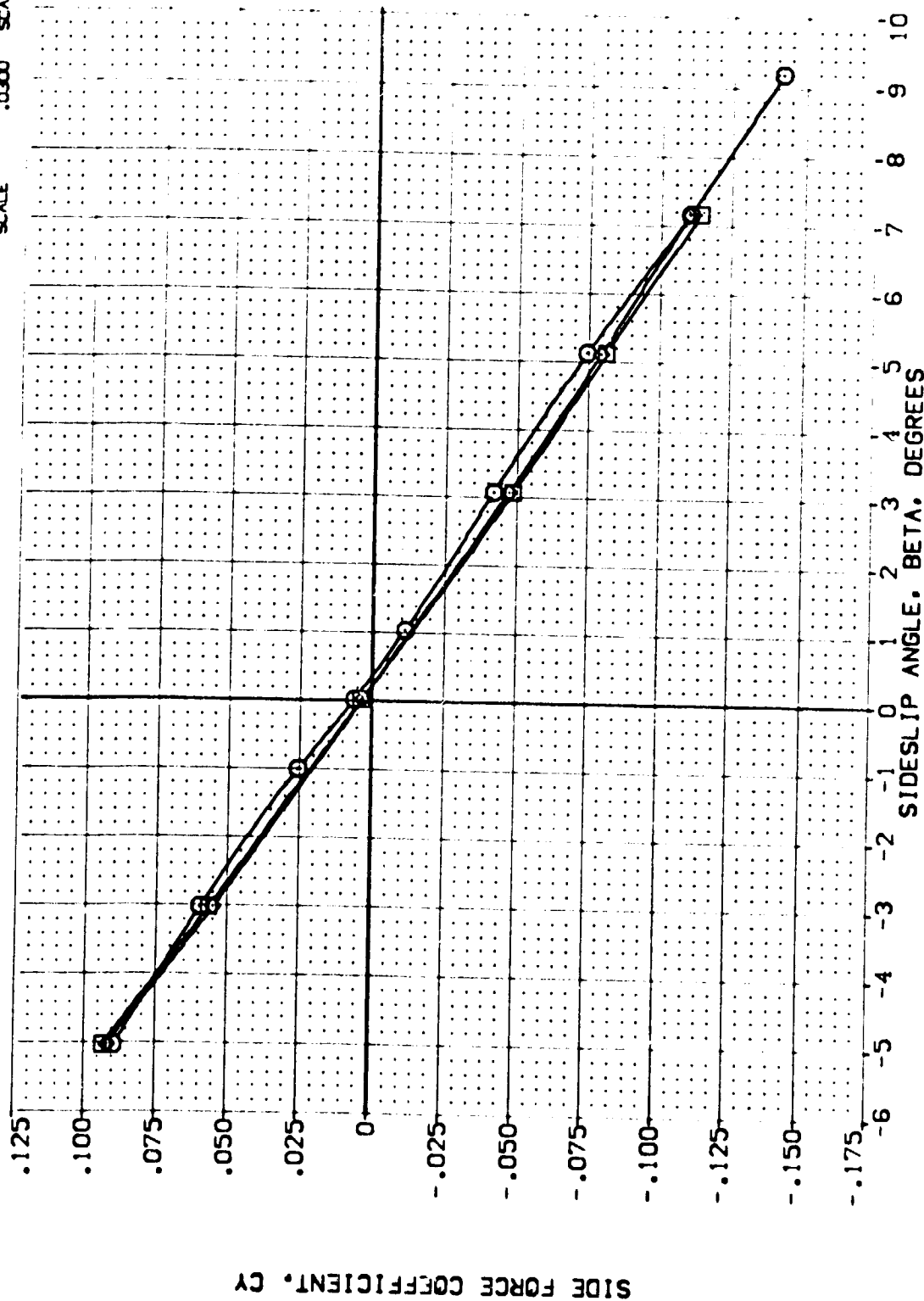


FIG. 25 SPEEDBRAKE EFFECTS

(E)MACH = 1.20

DATA SET SYMBOL CONFIGURATION DESCRIPTION

{ AE1014 } ARC 11-747 0A53A B C H F V1 V NON: RV/L

{ AE1027 } ARC 11-747 0A53A B C H F V1 V NON: RV/L

{ AE1041 } ARC 11-747 0A53A B C H F V1 V NON: RV/L

ALPHA RUDDER BDFLAP SPOBRK

20.000 .000 -11.700 25.000

20.000 .000 -11.700 55.000

20.000 .000 -11.700 85.000

REFERENCE INFORMATION

SREF 2.4210 SQ.FT.

LREF 14.2440 IN.

BREF 28.1004 IN.

XMRP 32.3010 IN.

YMRP .0000 IN.

ZMRP 11.2500 IN.

SCALE .0300

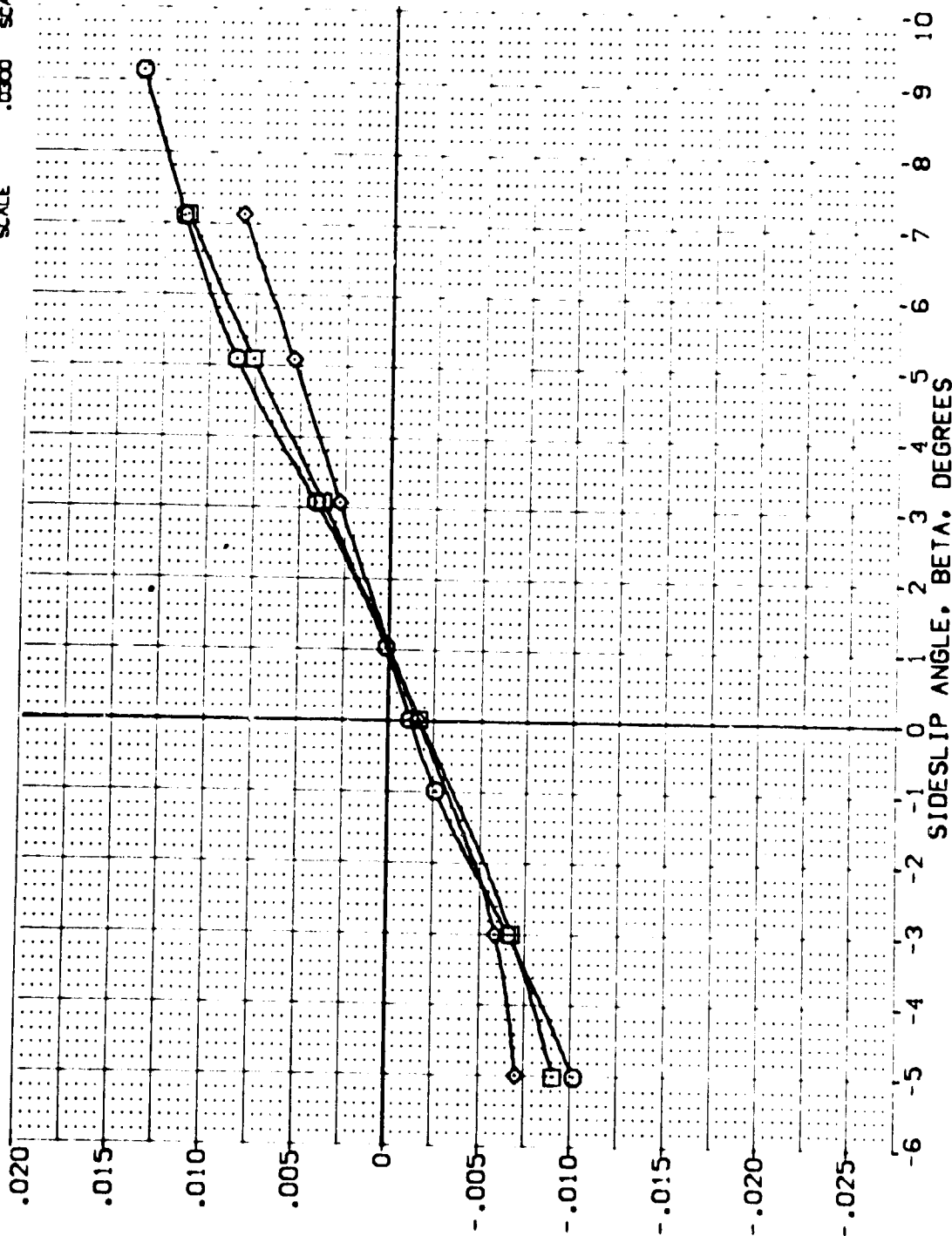


FIG. 25 SPEEDBRAKE EFFECTS

(A)MAC = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDER	BDLAP	SPEED	REFERENCE INFORMATION
(AEJ014)	ARC 11-747 BA53A B C H F VI V	20.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(AEJ027)	ARC 11-747 BA53A B C H F VI V	20.000	.000	-11.700	55.000	LREF 14.2440 IN.
(AEJ041)	ARC 11-747 BA53A B C H F VI V	20.000	.000	-11.700	85.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

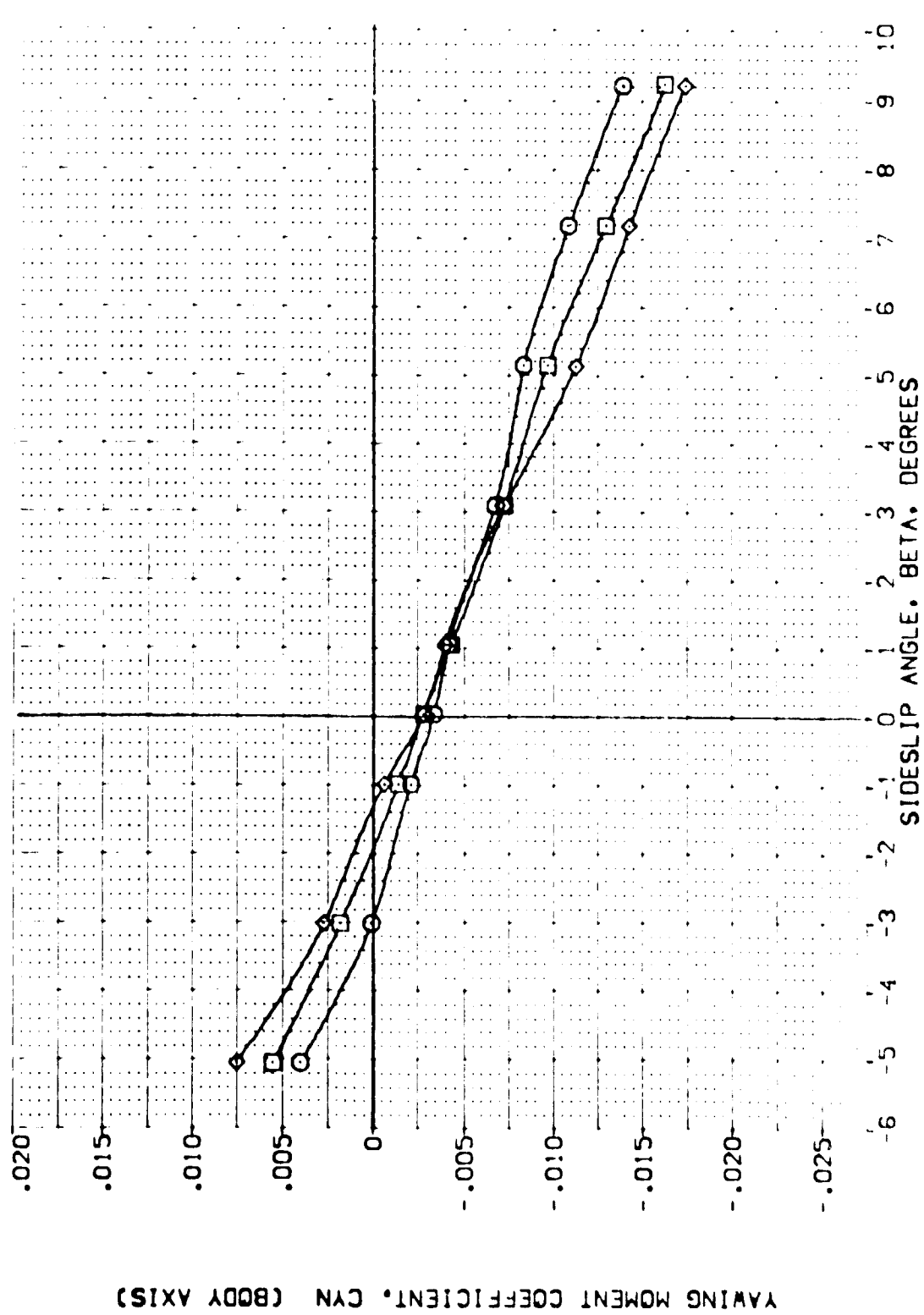


FIG. 25 SPEEDBRAKE EFFECTS

(B)MAC = .80



DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 [ALF014] ARC 11-747 DAS3A B C H F VI V  
 [ALF027] ARC 11-747 DAS3A B C H F VI V  
 [ALF041] ARC 11-747 DAS3A B C H F VI V

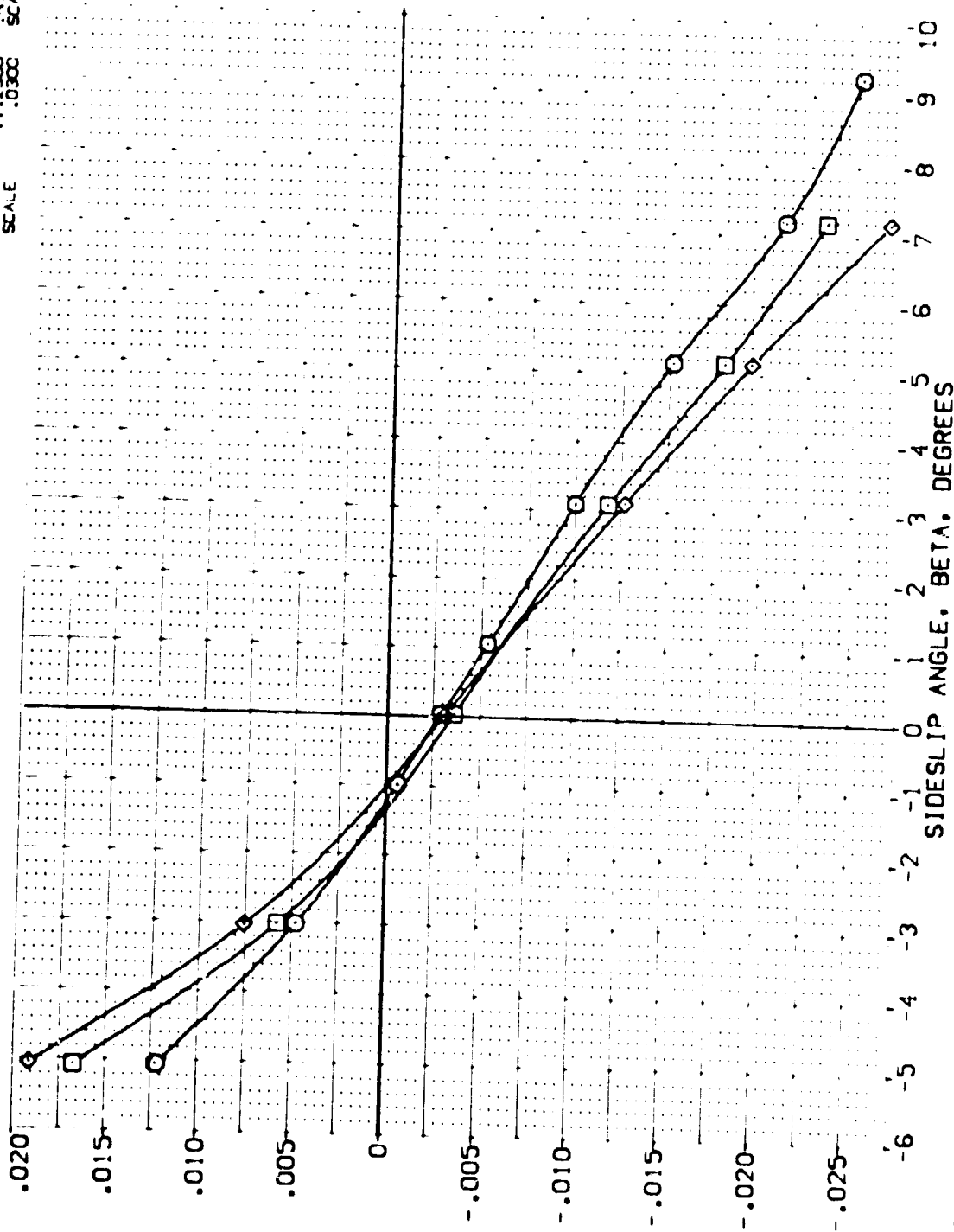
ALPHA  
 20.000  
 20.000  
 20.000

RUDDER  
 .000  
 .000  
 .000

BOFLAP  
 -11.700  
 -11.700  
 -11.700

SPOBRK  
 25.000  
 55.000  
 85.000

REFERENCE INFORMATION  
 SREF 2.4210 50.000  
 LREF 14.2440 10.000  
 BREF 28.1004 10.000  
 XREF 32.3010 10.000  
 YREF 11.2500 10.000  
 ZREF 11.2500 10.000  
 SCALE .0300



YAWING MOMENT COEFFICIENT, CYN (BODY AXIS)

FIG. 25 SPEEDBRAKE EFFECTS

(C)MAC = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPOBRK	REFERENCE INFORMATION
(AEJ014)	ARC 11-747 DAS3A B C M F V	20.000	.000	-11.700	25.000	SREF 2.4210 SD.FT.
(AEJ027)	ARC 11-747 DAS3A B C M F V	20.000	.000	-11.700	55.000	LREF 14.2440
(AEJ041)	ARC 11-747 DAS3A B C M F V	20.000	.000	-11.700	85.000	BREF 28.1004
						XMRP 32.3010
						YMRP .0000
						ZMRP 11.2500
						SCALE .0300

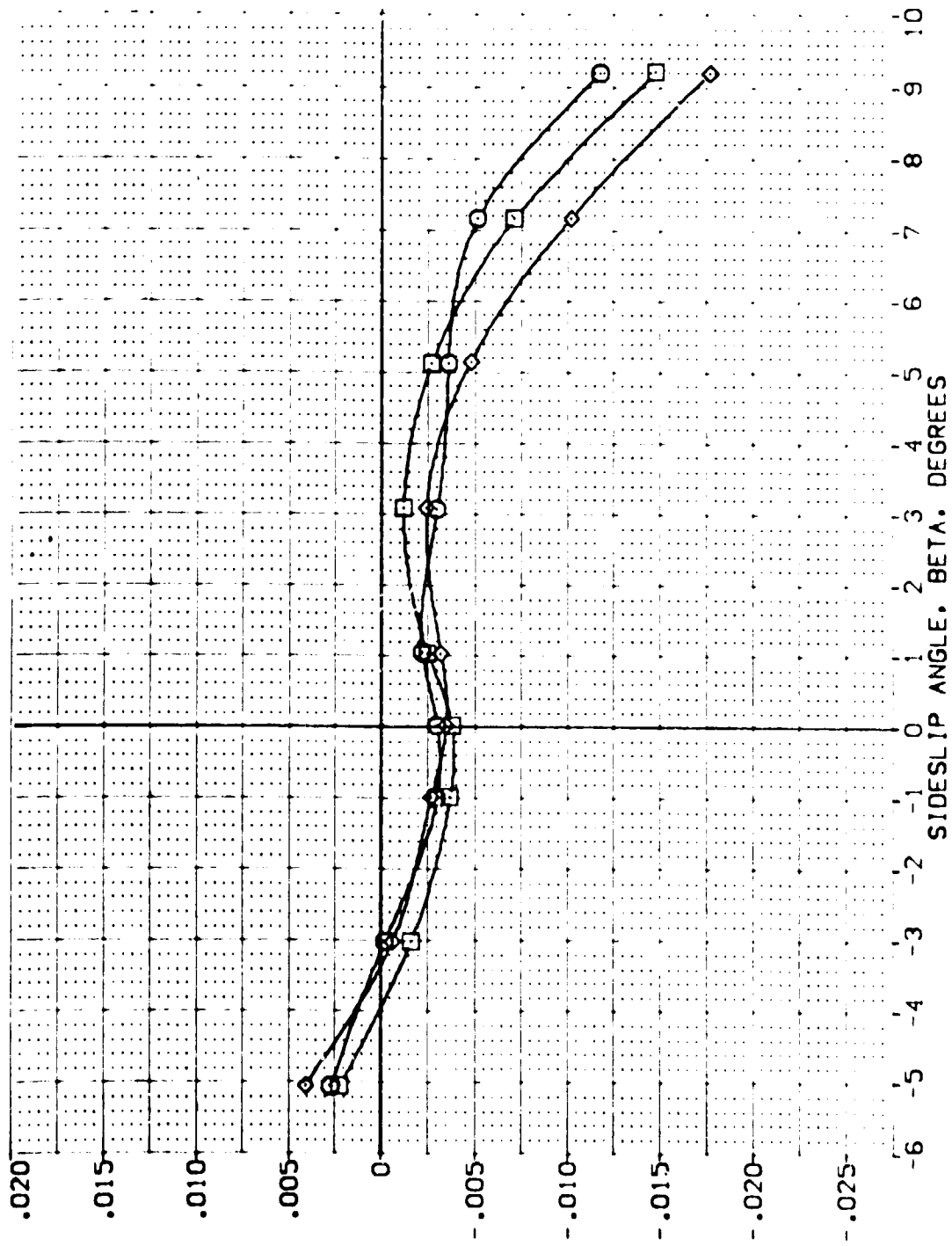


FIG. 25 SPEEDBRAKE EFFECTS

(C)MAC = 1.06

DATA SET SYMBOL CONFIGURATION DESCRIPTION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPEED	REFERENCE INFORMATION
[AEJ014]	ARC 11-747 QAS3A B C H F VI V	20.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[AEJ027]	ARC 11-747 QAS3A B C H F VI V	20.000	.000	-11.700	55.000	LREF 14.2440
[AEJ041]	ARC 11-747 QAS3A B C H F VI V	20.000	.000	-11.700	65.000	BREF 28.1004
						XMRP 32.3010
						YMRP .0000
						ZMRP .0000
						SCALE 11.2500
						SCALE .0300

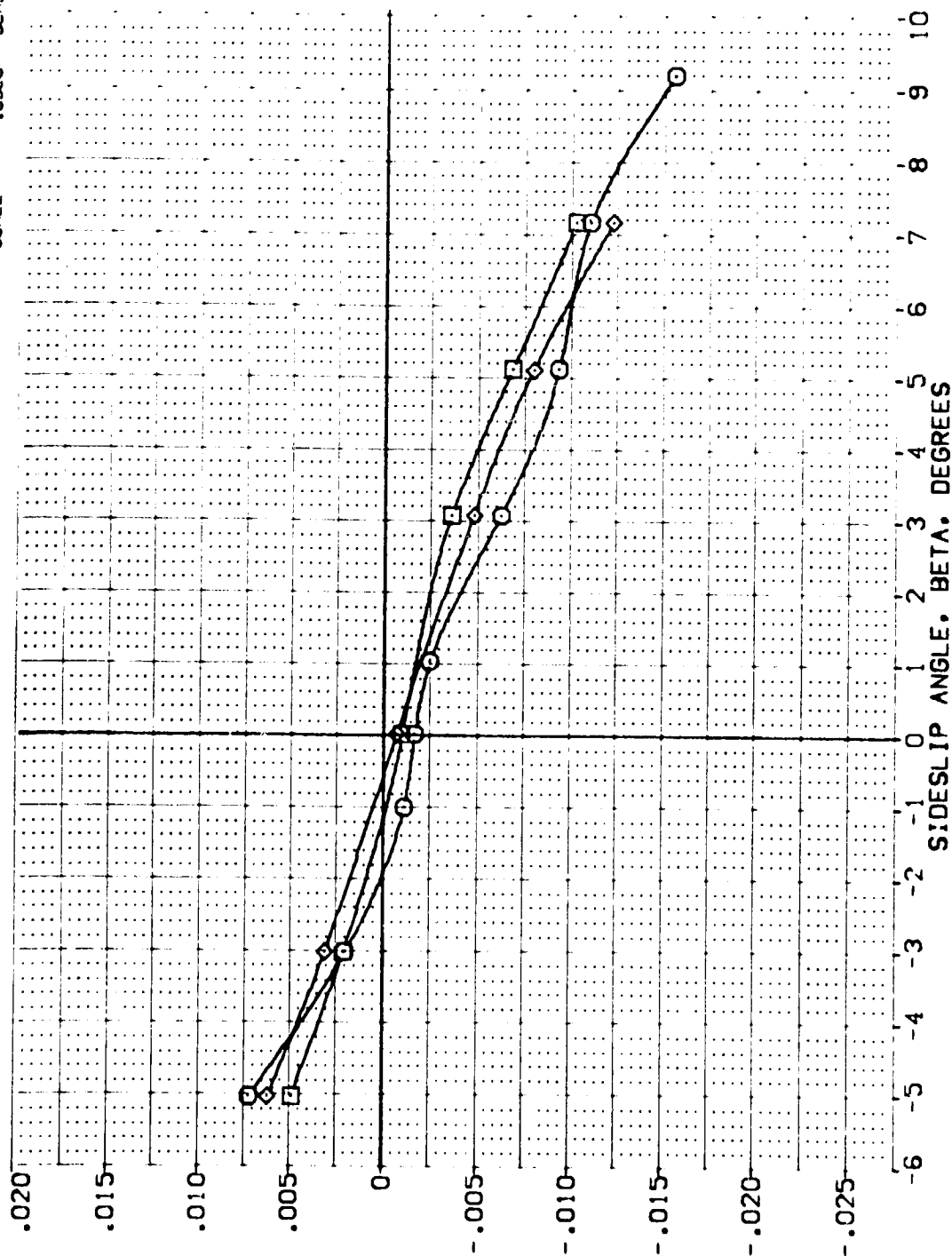


FIG. 25 SPEEDBRAKE EFFECTS

(E)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPEEDBRAK	REFERENCE INFORMATION
[AEJ014]	ARC 11-747 BA53A B C M F V	20.000	.000	-11.700	25.000	SREF 2.4210 SQ. FT.
[AEJ027]	ARC 11-747 BA53A B C M F V	20.000	.000	-11.700	55.000	LREF 14.2440 IN.
[AEJ041]	ARC 11-747 BA53A B C M F V	20.000	.000	-11.700	85.000	BREF 28.1004 IN.
						XREF 32.3010 IN.
						YREF 0.000 IN.
						ZREF 11.2500 IN.
						SCALE 0.000

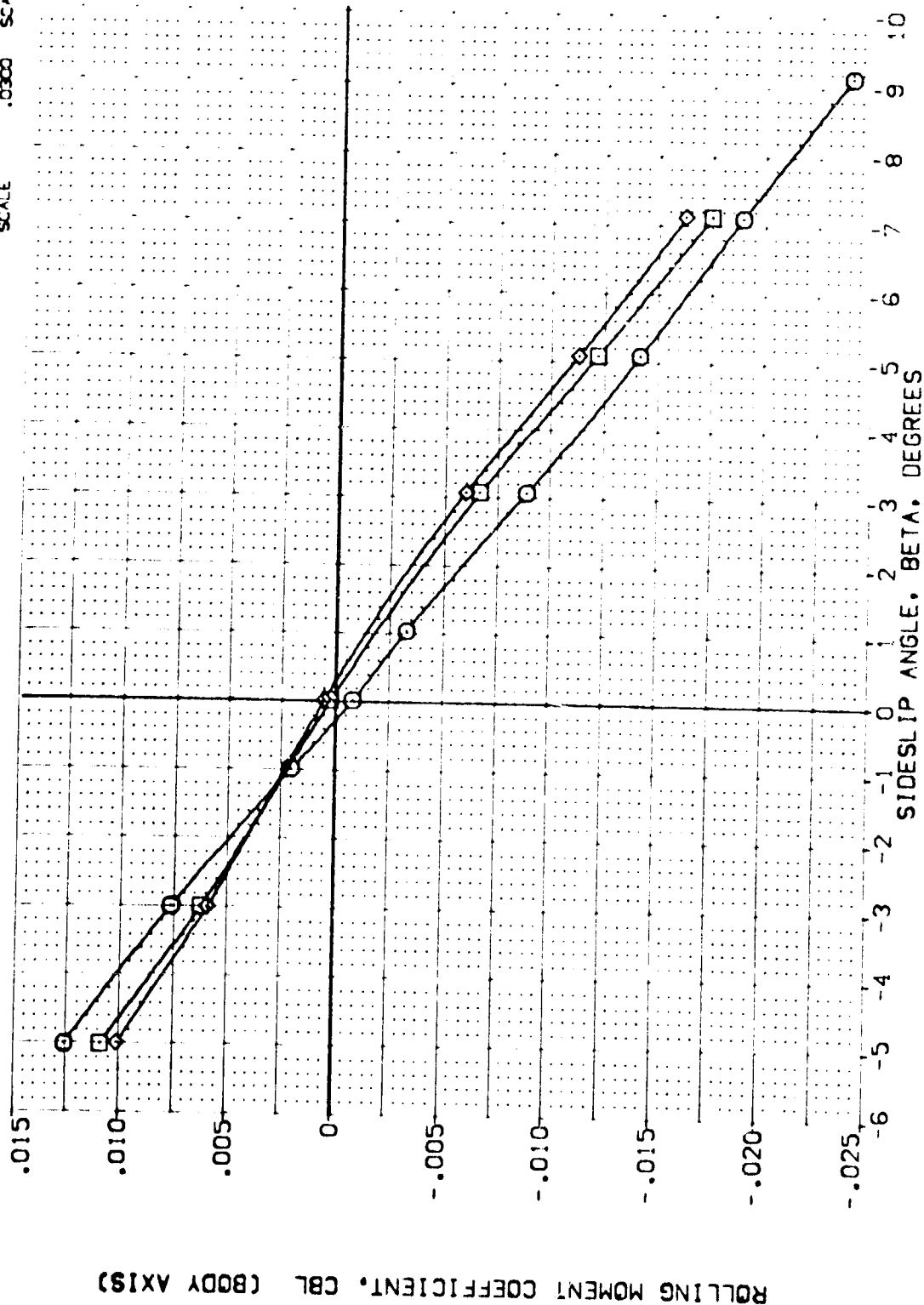


FIG. 25 SPEEDBRAKE EFFECTS

(A)MAC = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDER	BOFLAP	SPOBRK	REFERENCE INFORMATION
{AEJ014}	ARC 11-747 BAS3A B C M F VI V	20.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
{AEJ027}	ARC 11-747 BAS3A B C M F VI V	20.000	.000	-11.700	55.000	LREF 14.2440
{AEJ041}	ARC 11-747 BAS3A B C M F VI V	20.000	.000	-11.700	85.000	BREF 28.1004
						XREF 32.3010
						YREF .0000
						ZREF 11.2500
						SCALE .0300

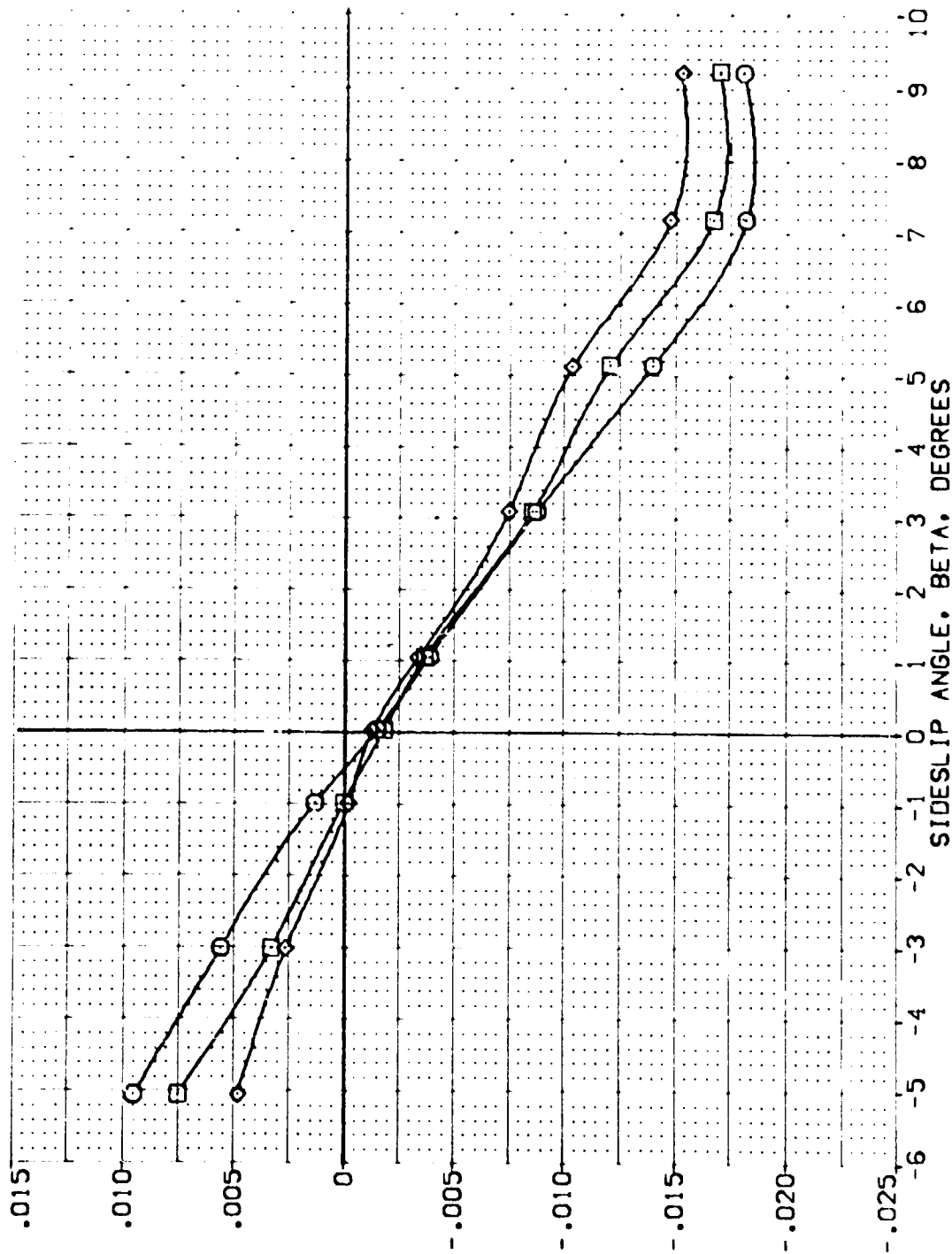


FIG. 25 SPEEDBRAKE EFFECTS

(3)MAC = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BD FLAP	SPOBRK	REFERENCE INFORMATION
[AEJ014]	ARC 11-747 BA53A B C M F V	20.000	.000	-11.700	75.000	SREF 2.4210 SQ.FT.
[AEJ077]	ARC 11-747 BA53A B C M F V	20.000	.000	-11.700	55.000	LREF 14.2440 IN.
[AEJ041]	ARC 11-747 BA53A B C M F V	20.000	.000	-11.700	65.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP 7.0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300 SCALE

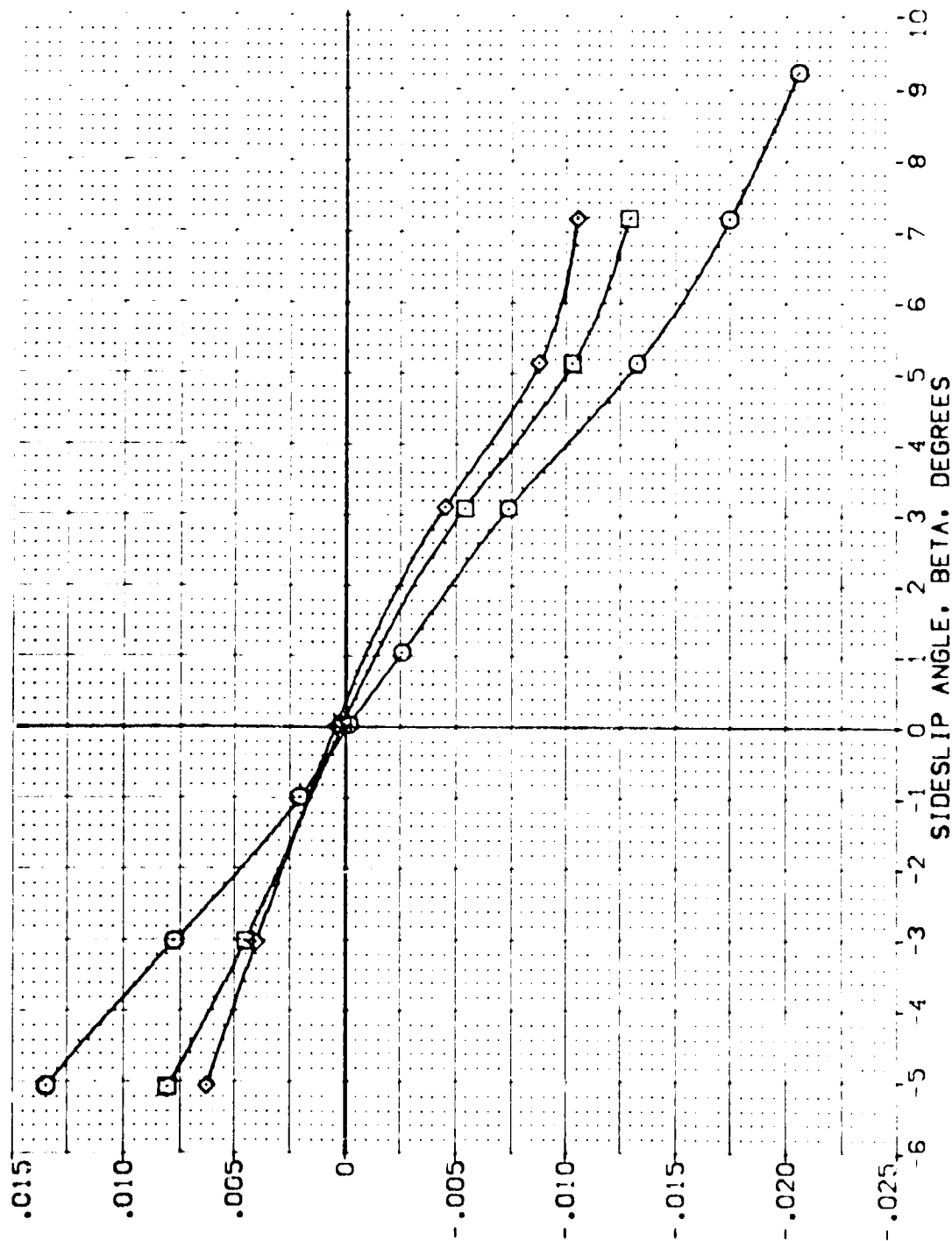


FIG. 6.25 SPEEDBRAKE EFFECTS

(C)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	FLUDER	BDF LAP	SPDBRK	REFERENCE INFORMATION
[AE2014]	ARC 11-747 BAS3A B C H F V	20.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[AE4027]	ARC 11-747 BAS3A B C H F V	20.000	.000	-11.700	53.000	SREF 14.2440
[AE6041]	ARC 11-747 BAS3A B C H F V	20.000	.000	-11.700	85.000	SREF 28.1004
						XMRP 32.3010
						YMRP .0000
						ZMRP .0000
						SCALE 11.2500
						SCALE .0300

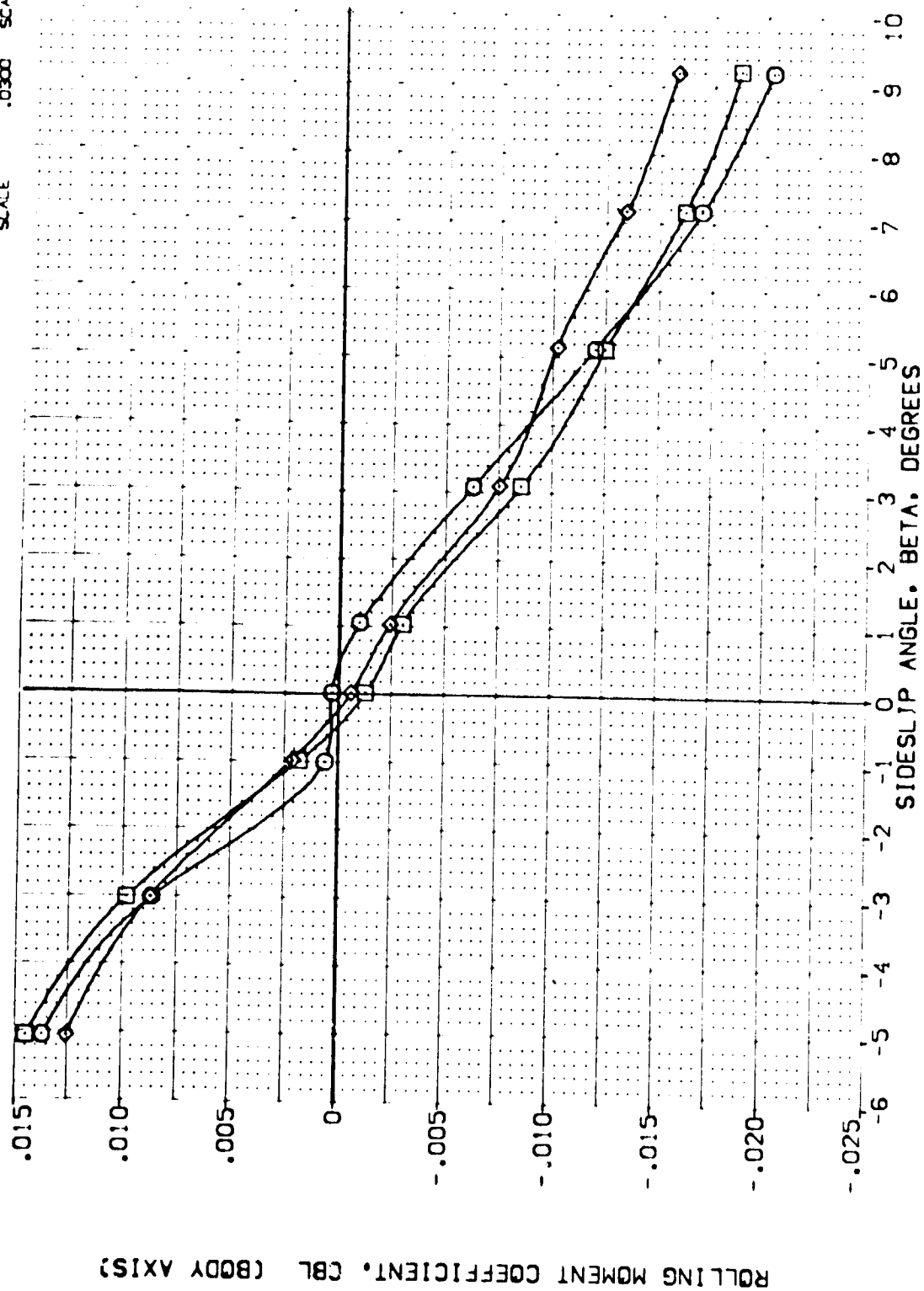


FIG. 25 SPEEDBRAKE EFFECTS

COMAC = 1.06

DATA SET SYMBOL	CONF IGURATION DESCRIPTION	ALPHA	RUDDER	BD/LAP	SPEED	REFERENCE INFORMATION
[AEJ014]	ARC 11-747 DA53A B C H F V1 V	20.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[AEJ027]	ARC 11-747 DA53A B C H F V1 V	20.000	.000	-11.700	55.000	LREF 14.2440 IN.
[AEJ041]	ARC 11-747 DA53A B C H F V1 V	20.000	.000	-11.700	85.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

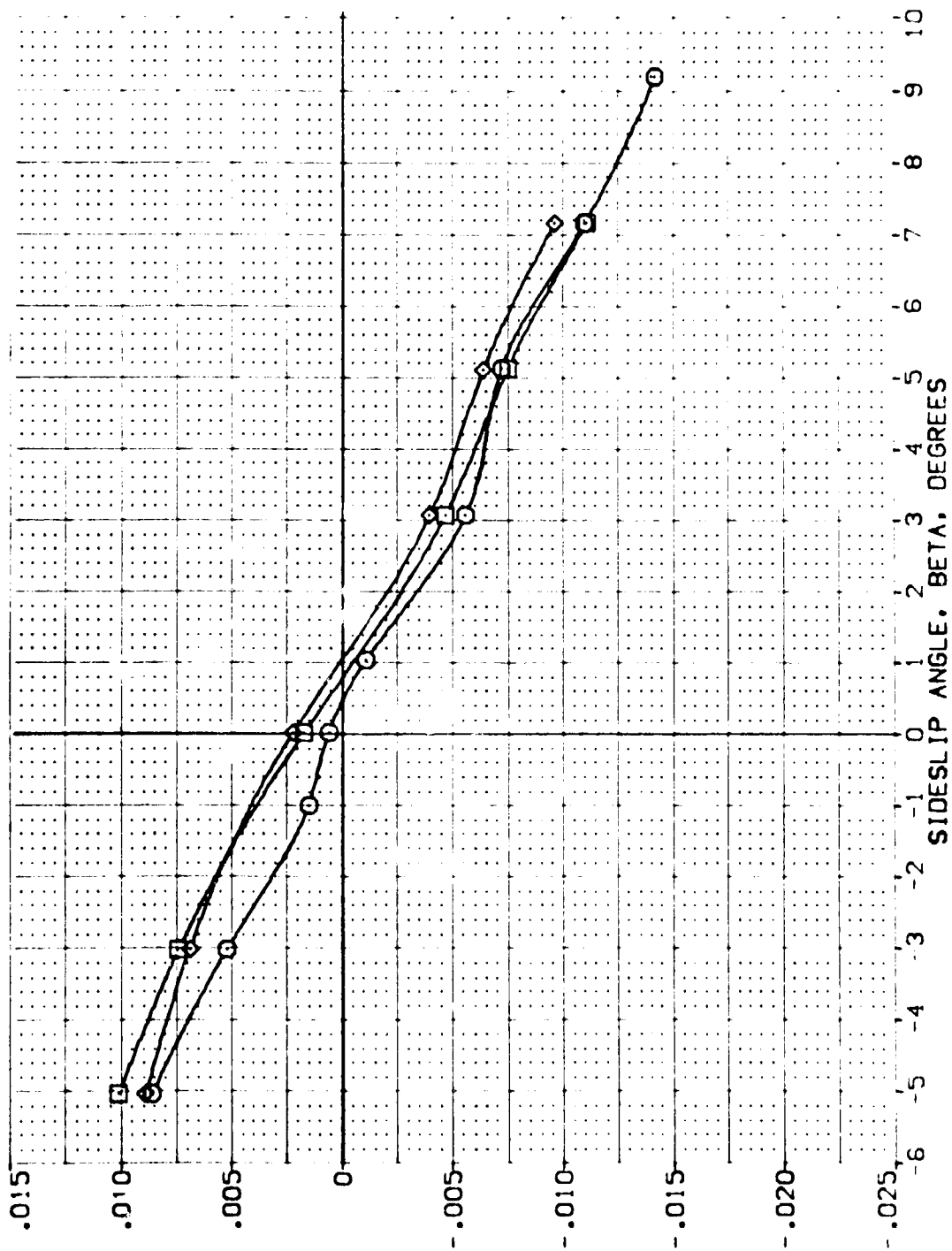


FIG. 25 SPEEDBRAKE EFFECTS

(E)MAC = 1.20



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	ELEVON	REFERENCE INFORMATION
(VEJ025)	ARC 11-747 QAS3A B C H F VI V	.000	.000	-11.700	.000	SREF 2.4210 SQ.FT.
(VEJ026)	ARC 11-747 QAS3A B C H F VI V	10.000	.000	-11.700	.000	LREF 14.2440 IN.
(VEJ027)	ARC 11-747 QAS3A B C H F VI V	20.000	.000	-11.700	.000	BREF 28.1004 IN.
						XMPR 32.3010 IN.
						YMPR .0000 IN.
						ZMPR 11.2500 IN.
						SCALE .0300

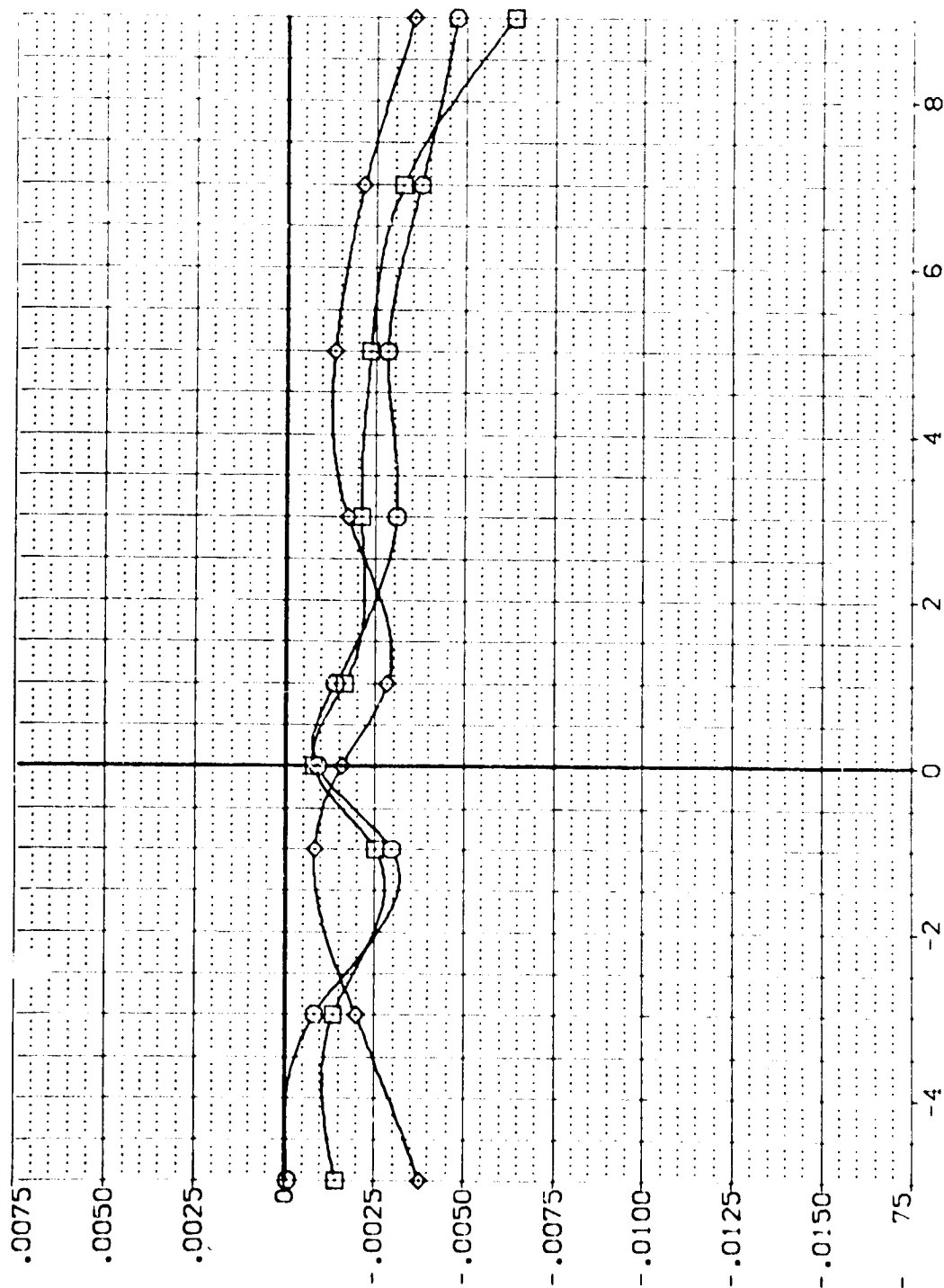


FIG. 26 INCREMENTAL SPEEDBRAKE EFFECTS (DSB= 55 - 25)

(A) MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	ELEVON	REFERENCE INFORMATION
(VEJ025)	ARC 11-747 0A53A B C M F V1 V	0.000	.000	-11.700	.000	2.4210 SQ.FT.
(VEJ026)	ARC 11-747 0A53A B C M F V1 V	10.000	.000	-11.700	.000	14.2440 IN.
(VEJ027)	ARC 11-747 0A53A B C M F V1 V	20.000	.000	-11.700	.000	28.1004 IN.
						32.3010 IN.
						11.2500 IN.
						SCALE .0300

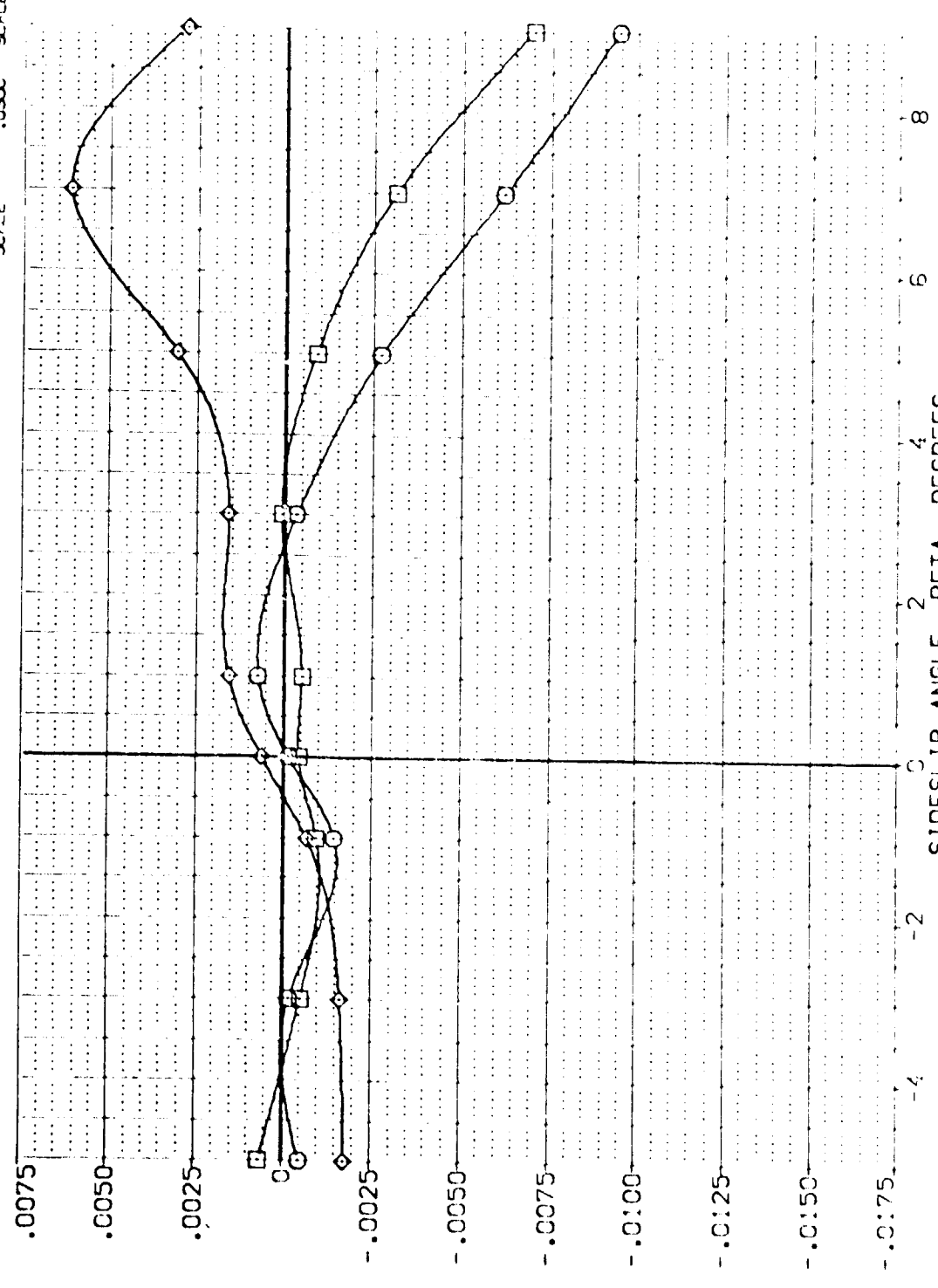


FIG. 26 INCREMENTAL SPEEDBRAKE EFFECTS (DSB= 55 - 25)

(B)MAC = .80

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(VEJ025)	ARC 11-747	QAS3A	B	C	H	F	V	V	NOM.	RVL
(VEJ026)	ARC 11-747	QAS3A	B	C	H	F	V	V	NOM.	RVL
(VEJ027)	ARC 11-747	QAS3A	B	C	H	F	V	V	NOM.	RVL

ALPHA RUDDER BOFLAP ELEVON

.000	.000	-11.700	.000
10.000	.000	-11.700	.000
20.000	.000	-11.700	.000

REFERENCE INFORMATION

SREF	2.4210	50.000
LREF	14.2440	IN.
BREF	28.1004	IN.
XMRP	32.3010	IN.
YMRP	.0000	IN.
ZMRP	11.2500	IN.
SCALE	.0300	SCALE

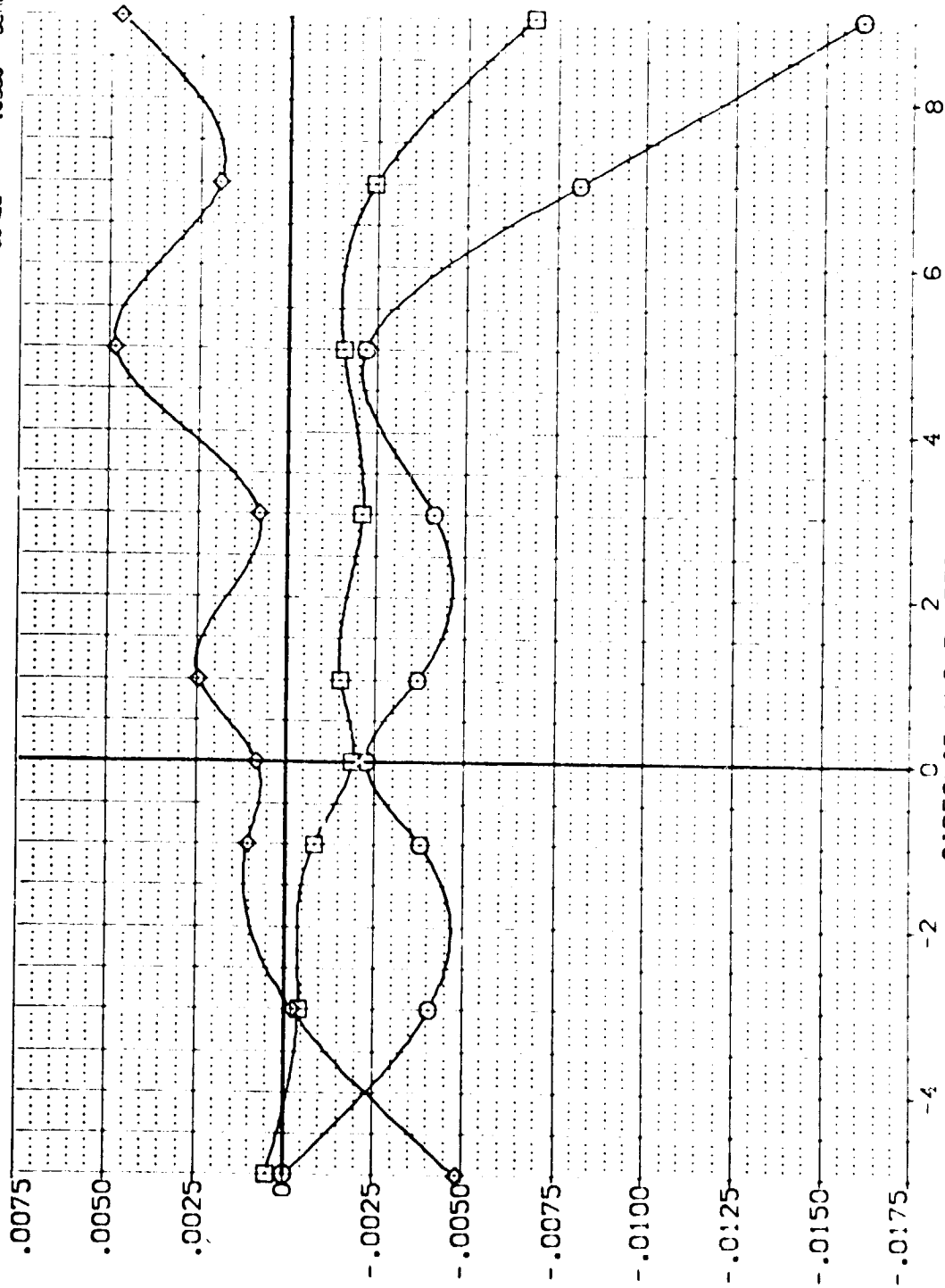


FIG. 26 INCREMENTAL SPEEDBRAKE EFFECTS (DSB= 55 - 25)

(C)MAC = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	ELEVON	REFERENCE INFORMATION
(VEJ025)	ARC 11-747 OA53A B C M F V	.000	.000	-11.700	.000	SREF 2.4210 SQ.FT.
(VEJ026)	ARC 11-747 OA53A B C M F V	10.000	.000	-11.700	.000	LREF 14.2440 IN.
(VEJ027)	ARC 11-747 OA53A B C M F V	20.000	.000	-11.700	.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP .0000 IN.
						SCALE .0300

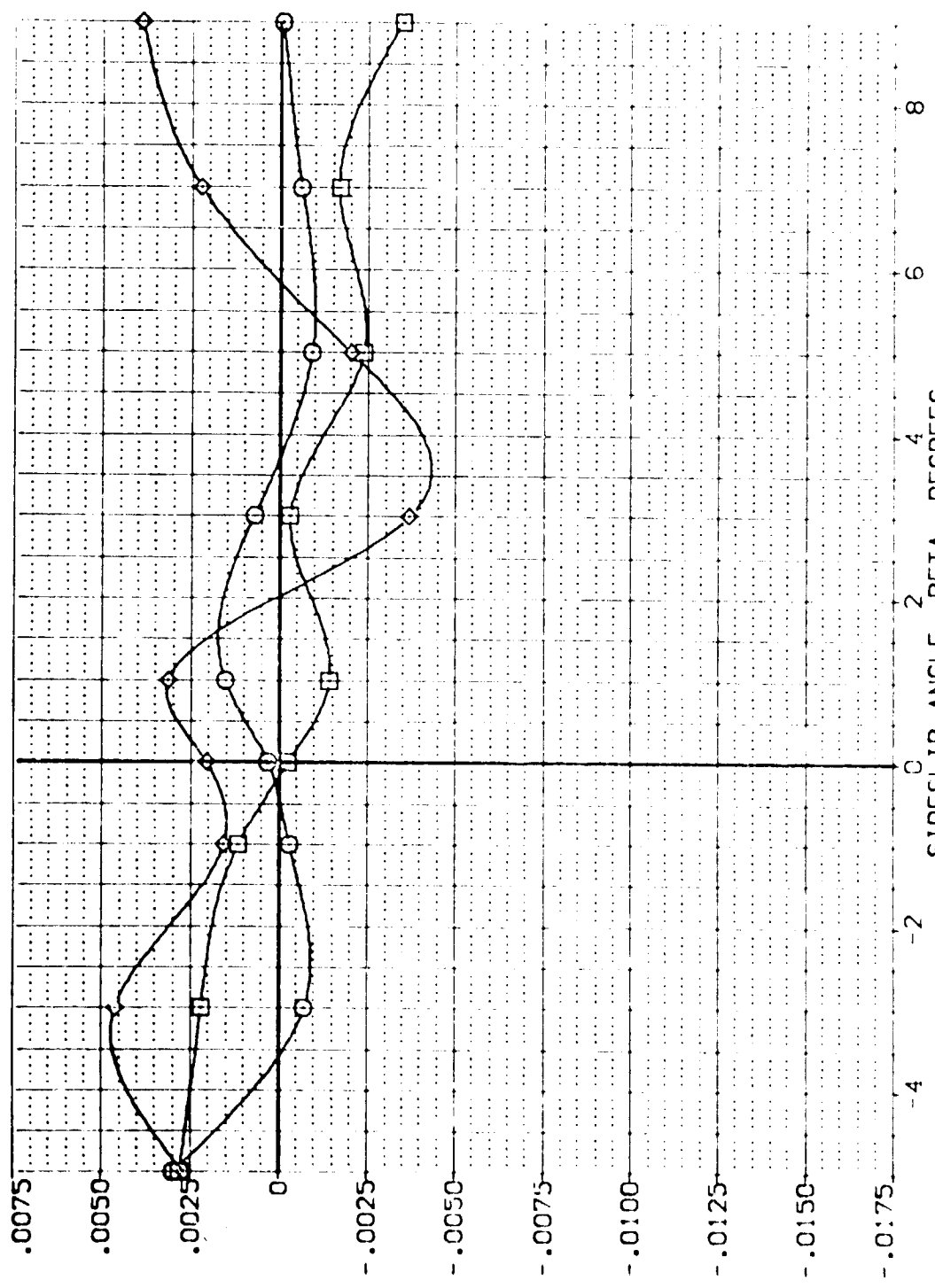


FIG. 26 INCREMENTAL SPEEDBRAKE EFFECTS (DSB= 55 - 25)

COMACH = 1.05

DATA SET SYMBOL. CONFIGURATION DESCRIPTION  
 (VEJ025) ARC 11-747 QAS3A B C M F VI V NOM. RV/L  
 (VEJ026) ARC 11-747 QAS3A B C M F VI V NOM. RV/L  
 (VEJ027) ARC 11-747 QAS3A B C M F VI V NOM. RV/L

ALPHA RUDDER BOFLAP ELEVON  
 .000 .000 .000 .000  
 10.000 .000 .000 .000  
 20.000 .000 .000 .000

REFERENCE INFORMATION  
 SREF 2.4210 SQ. FT.  
 LREF 14.2440 IN.  
 BREF 28.1004 IN.  
 YMRP 32.3010 IN.  
 ZMRP .0000 IN.  
 SCALE 11.2500 IN.  
 SCALE .0300

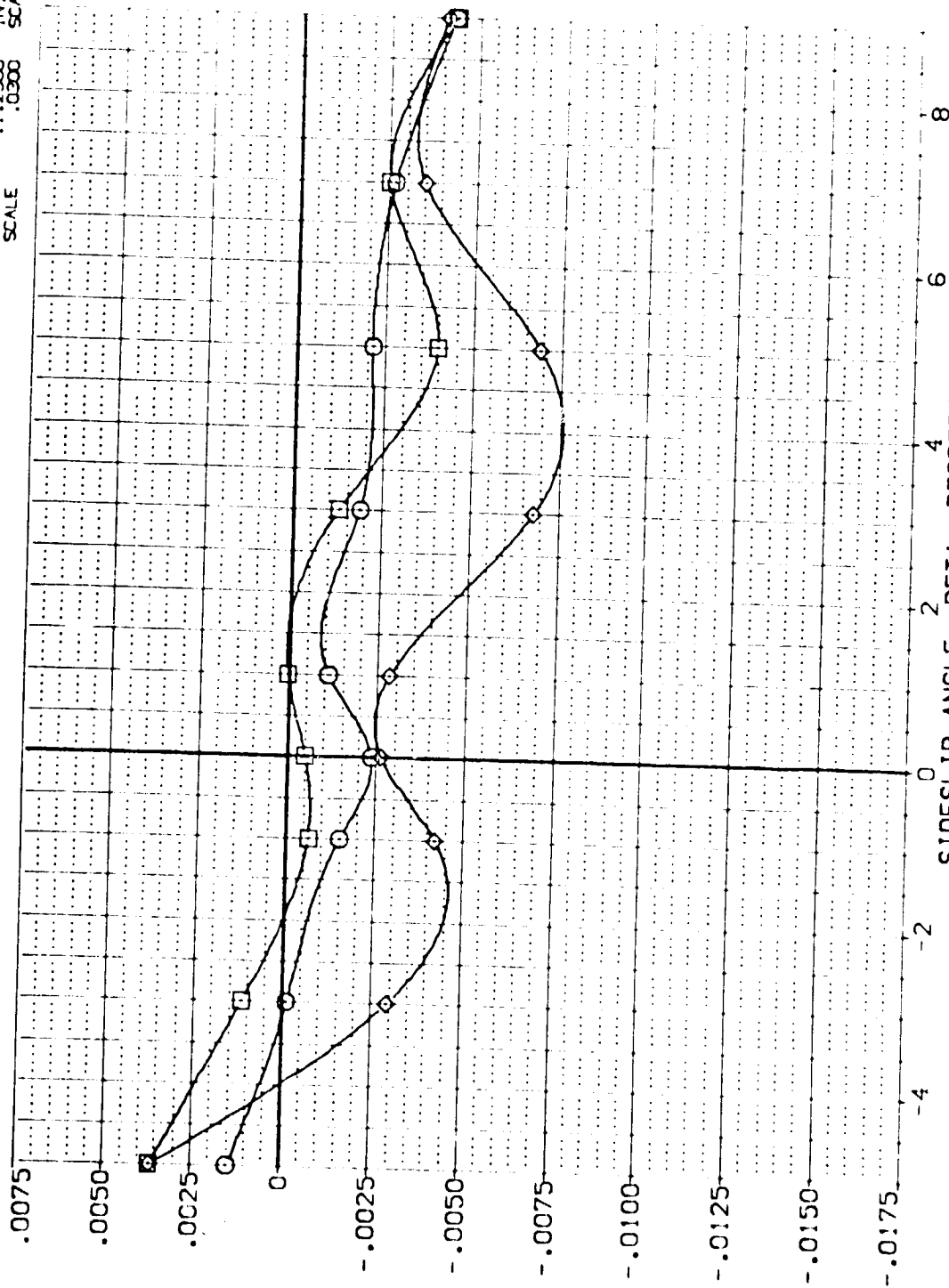


FIG. 26 INCREMENTAL SPEEDBRAKE EFFECTS (DSB= 55 - 25)

(E)MACH = 1.20



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOF LAP	ELEVON	REFERENCE INFORMATION
[VEJ0075]	ARC 11-747 DA53A B C M F V1 V	.000	.000	-11.700	.000	SREF 2.4210 SQ.FT.
[VEJ0076]	ARC 11-747 DA53A B C M F V1 V	10.000	.000	-11.700	.000	LREF 14.2440 IN.
[VEJ0077]	ARC 11-747 DA53A B C M F V1 V	20.000	.000	-11.700	.000	BREF 28.1004 IN.
						XREF 32.3010 IN.
						YREF 11.0000 IN.
						ZREF 11.2500 IN.
						SCALE .0300

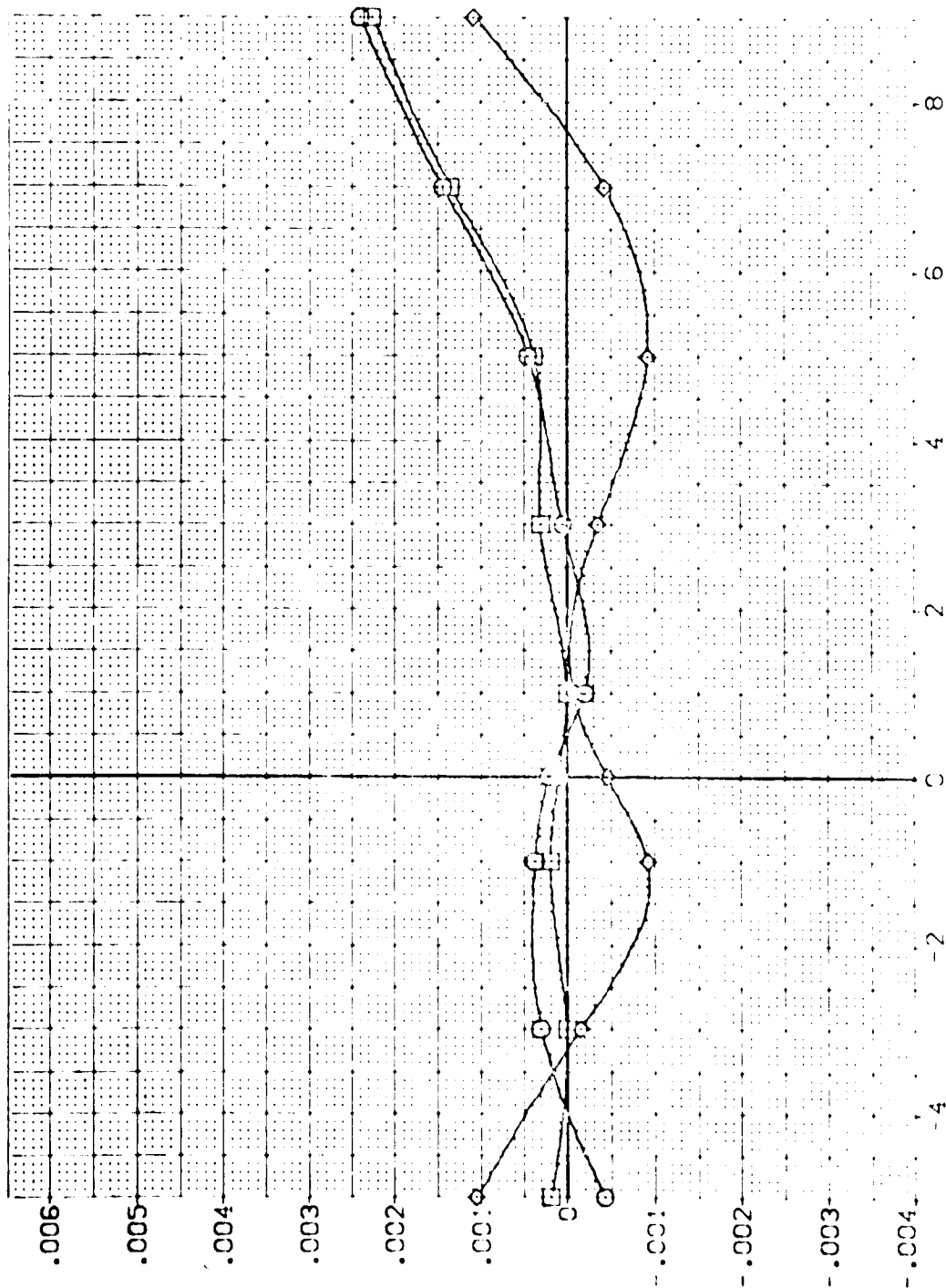
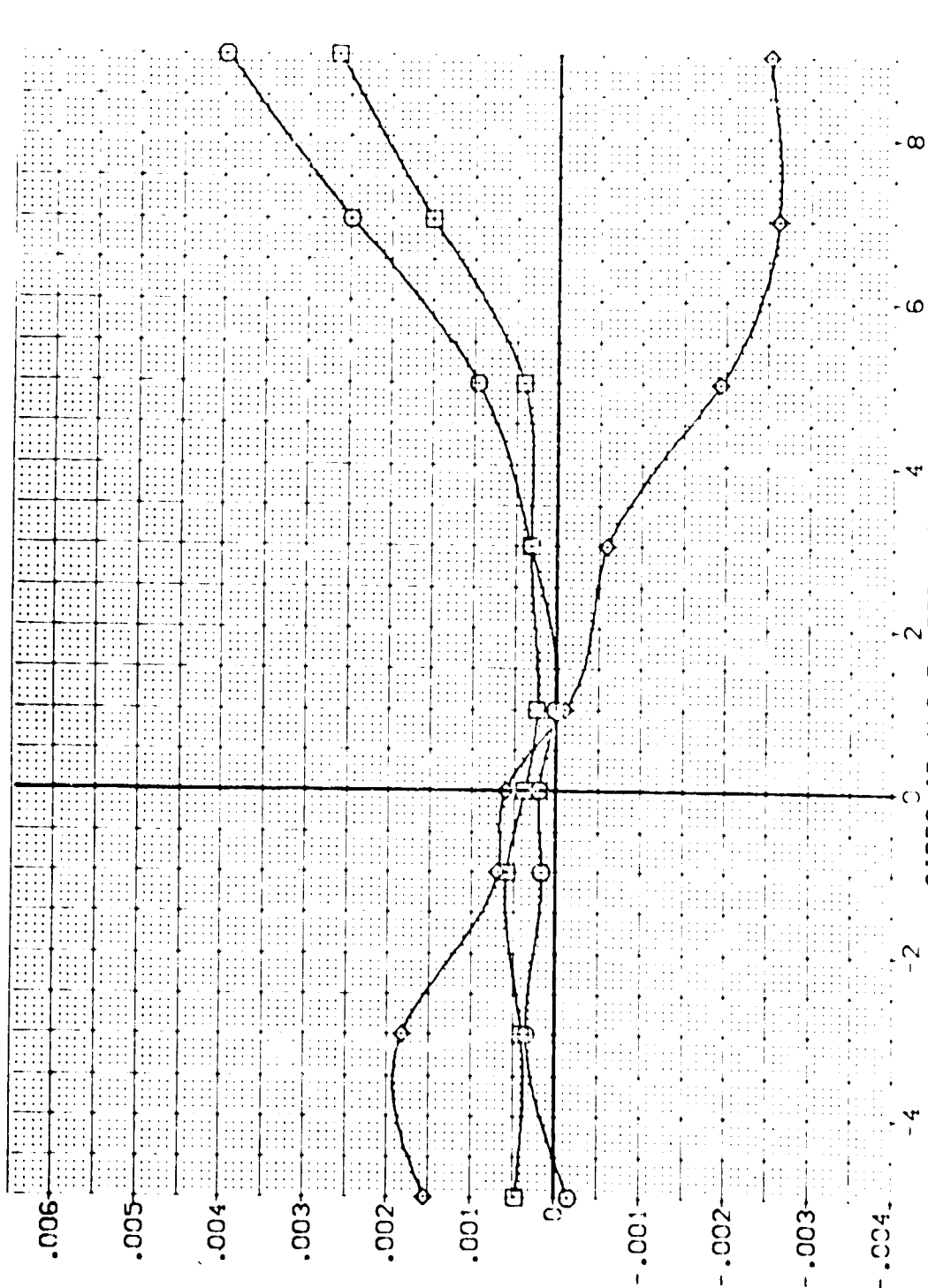


FIG. 26 INCREMENTAL SPEEDBRAKE EFFECTS (OSB= 55 - 25)

(A)MAC = .60

DATA SET SYMBOL: 98

CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	ELEVON	REFERENCE INFORMATION
ARC 11-747 DA53A B C H F V	.000	.000	-11.700	.000	SREF 2.4210 SU.FT.
ARC 11-747 DA53A B C H F V	10.000	.000	-11.700	.000	LREF 14.2410 IN.
ARC 11-747 DA53A B C H F V	20.000	.000	-11.700	.000	BREF 28.1004 IN.
					XREF 32.3010 IN.
					YREF .0000 IN.
					ZREF 11.2500 IN.
					SCALE .0000

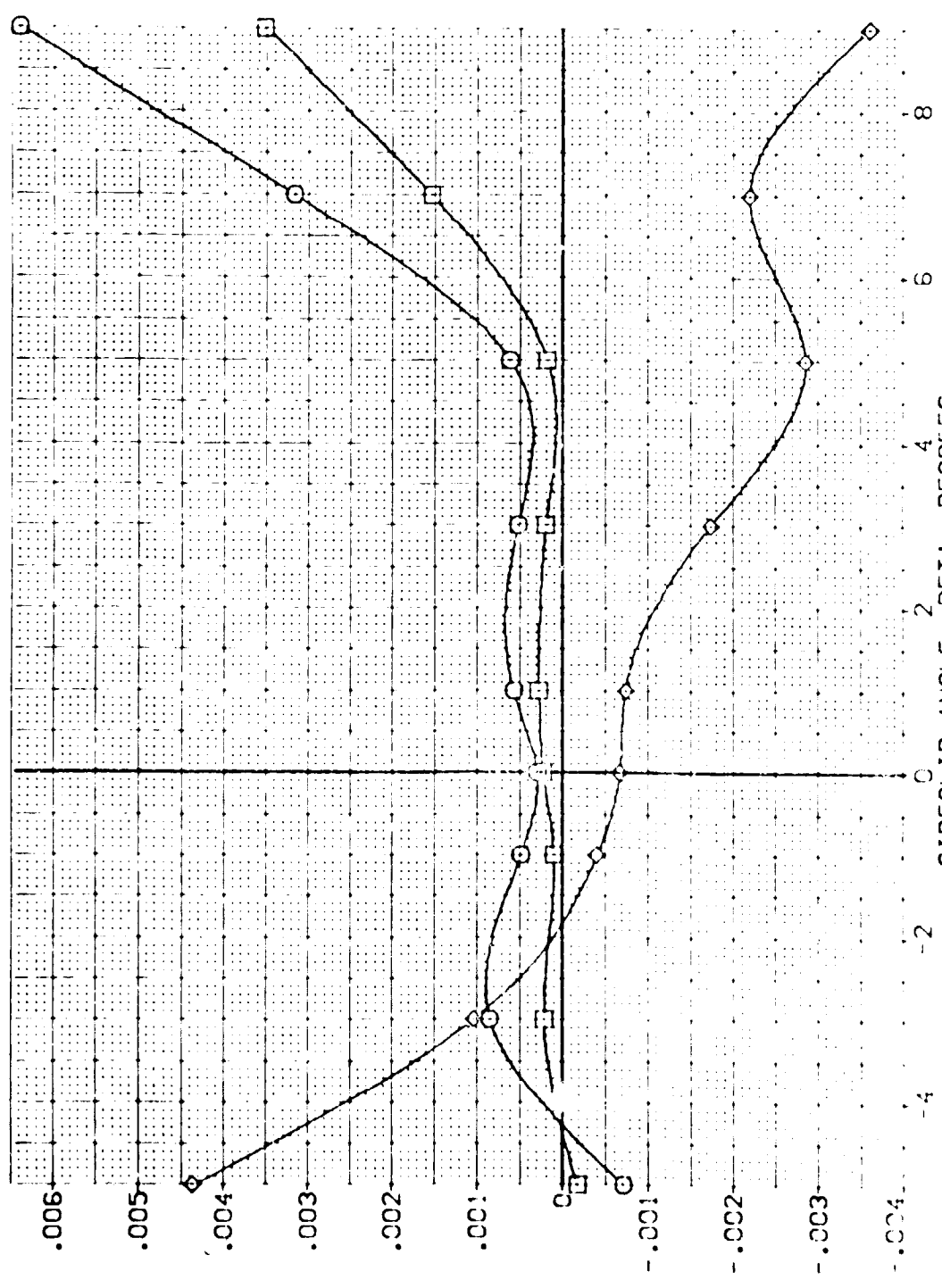


INCREMENTAL YAWING MOMENT COEFFICIENT, CYN

FIG. 26 INCREMENTAL SPEEDBRAKE EFFECTS (DSB= 55 - 25)

(B) MAG = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOE-LAP	ELEVON	REFERENCE INFORMATION
(VE4025)	ARC 11-747 BA53A B C H F V	.000	.000	-11.700	.000	SREF 2.4210 SQ.FT.
(VE4026)	ARC 11-747 BA53A B C H F V	10.000	.000	-11.700	.000	LREF 14.2440 IN.
(VE4027)	ARC 11-747 BA53A B C H F V	20.000	.000	-11.700	.000	BREF 28.1004 IN.
						XREF 32.3010 IN.
						YREF .0000 IN.
						ZREF 11.2500 IN.
						SCALE .0300



INCREMENTAL YAWING MOMENT COEFFICIENT, DCYN

FIG. 26 INCREMENTAL SPEEDBRAKE EFFECTS (DSB= 55 - 25)

(C)MAG - .90



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	ELEVON	REFERENCE INFORMATION
{ VEJ025 }	ARC 11-747 BAS3A B C H F VI V	.000	.000	-11.700	.000	SREF 2.4210 SQ.FT.
{ VEJ026 }	ARC 11-747 BAS3A B C H F VI V	10.000	.000	-11.700	.000	LREF 14.2440 IN.
{ VEJ027 }	ARC 11-747 BAS3A B C H F VI V	20.000	.000	-11.700	.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP 11.0000 IN.
						ZMRP 11.2530 IN.
						SCALE .0300

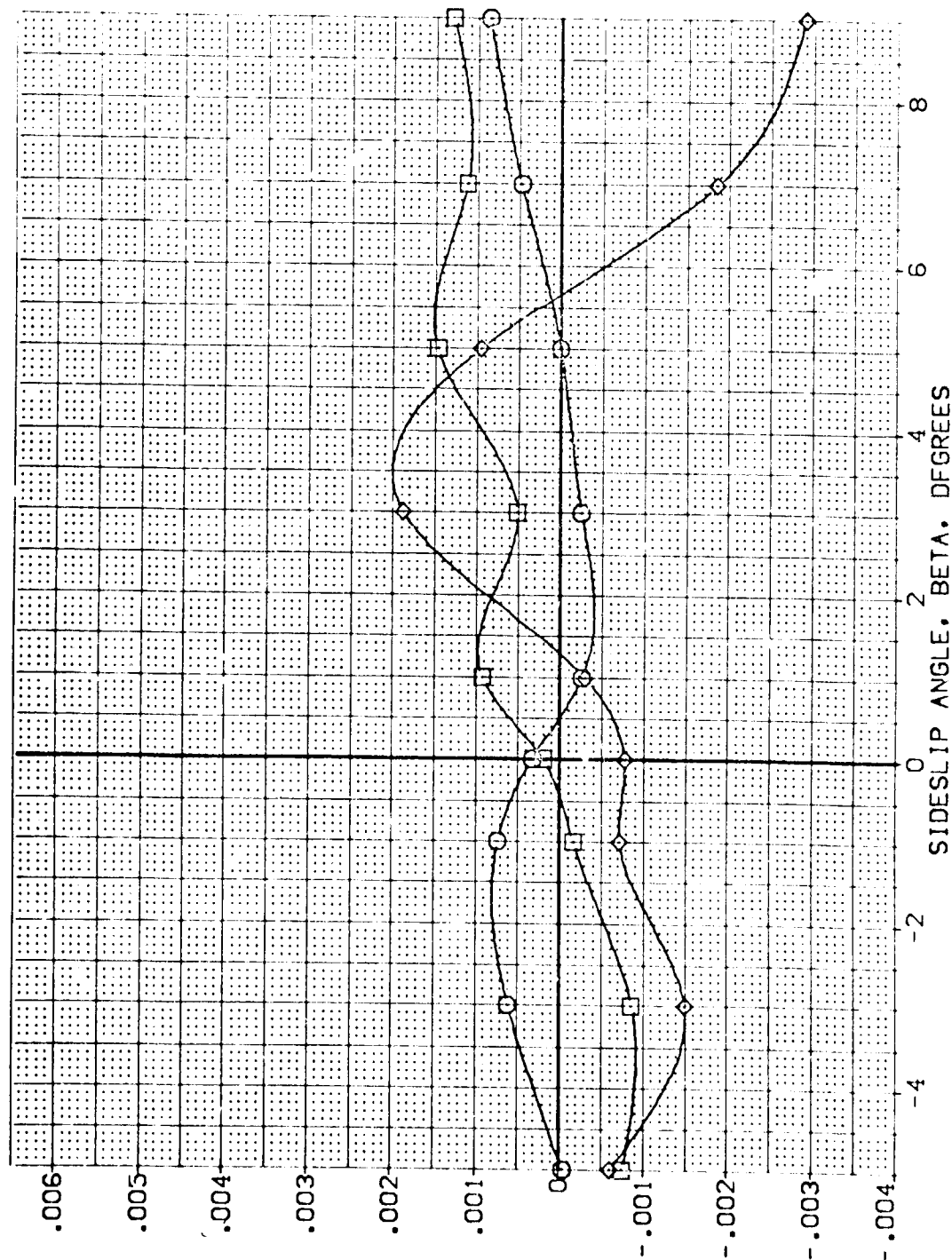


FIG. 26 INCREMENTAL SPEEDBRAKE EFFECTS (DSB= 55 - 25)

(D)MACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	ELEVON	REFERENCE INFORMATION
[VEJ025]	ARC 11-747 D4S3A B C M F V1 V	.000	.000	-11.700	.000	SREF 2.4210 SQ.FT.
[VEJ026]	ARC 11-747 D4S3A B C M F V1 V	10.000	.000	-11.700	.000	LREF 14.2440 IN.
[VEJ027]	ARC 11-747 D4S3A B C M F V1 V	20.000	.000	-11.700	.000	BREF 28.1004 IN.
						XREF 32.3010 IN.
						YREF .0000 IN.
						ZREF 11.2500 IN.
						SCALE .0000

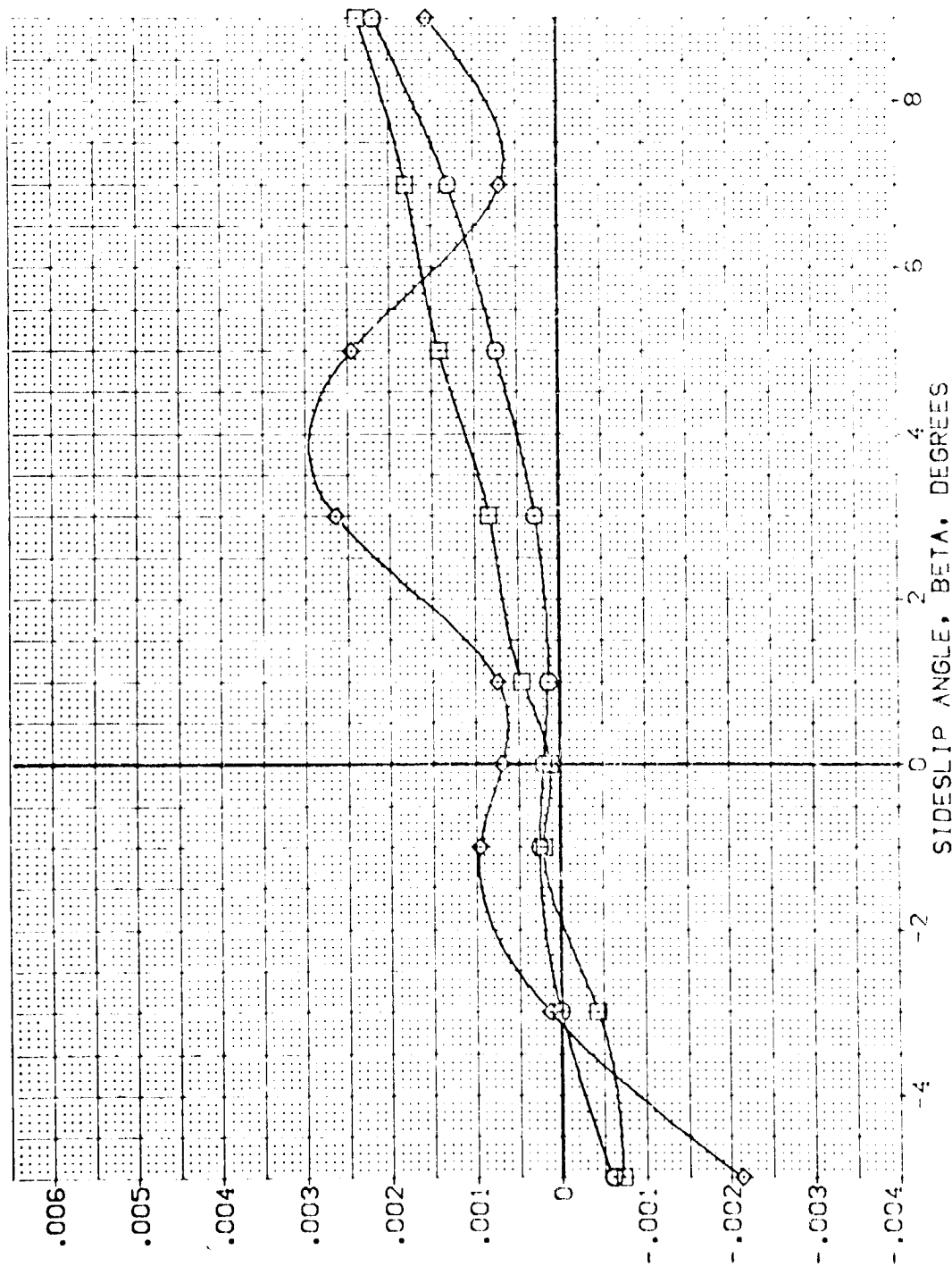


FIG. 26 INCREMENTAL SPEEDBRAKE EFFECTS (DSB= 55 - 25)

CEMACH = 1.20

DATA SET SYMBOL CONFIGURATION DESCRIPTION

DATA SET SYMBOL	CONFIGURATION	DESCRIPTION	ALPHA	RUDDER	BOG LAP	ELEVON	REFERENCE INFORMATION
(VE-025)	ARC 11-747	0A53A B C M F V	0.000	0.000	-11.700	0.000	SREF 2.4210 SQ. FT.
(VE-026)	ARC 11-747	0A53A B C M F V	10.000	0.000	-11.700	0.000	LREF 14.2140 IN.
(VE-027)	ARC 11-747	0A53A B C M F V	20.000	0.000	-11.700	0.000	BREF 28.004 IN.
							MREF 32.3010 IN.
							YREF 11.0000 IN.
							ZREF 11.2500 IN.
							SCALE 10000

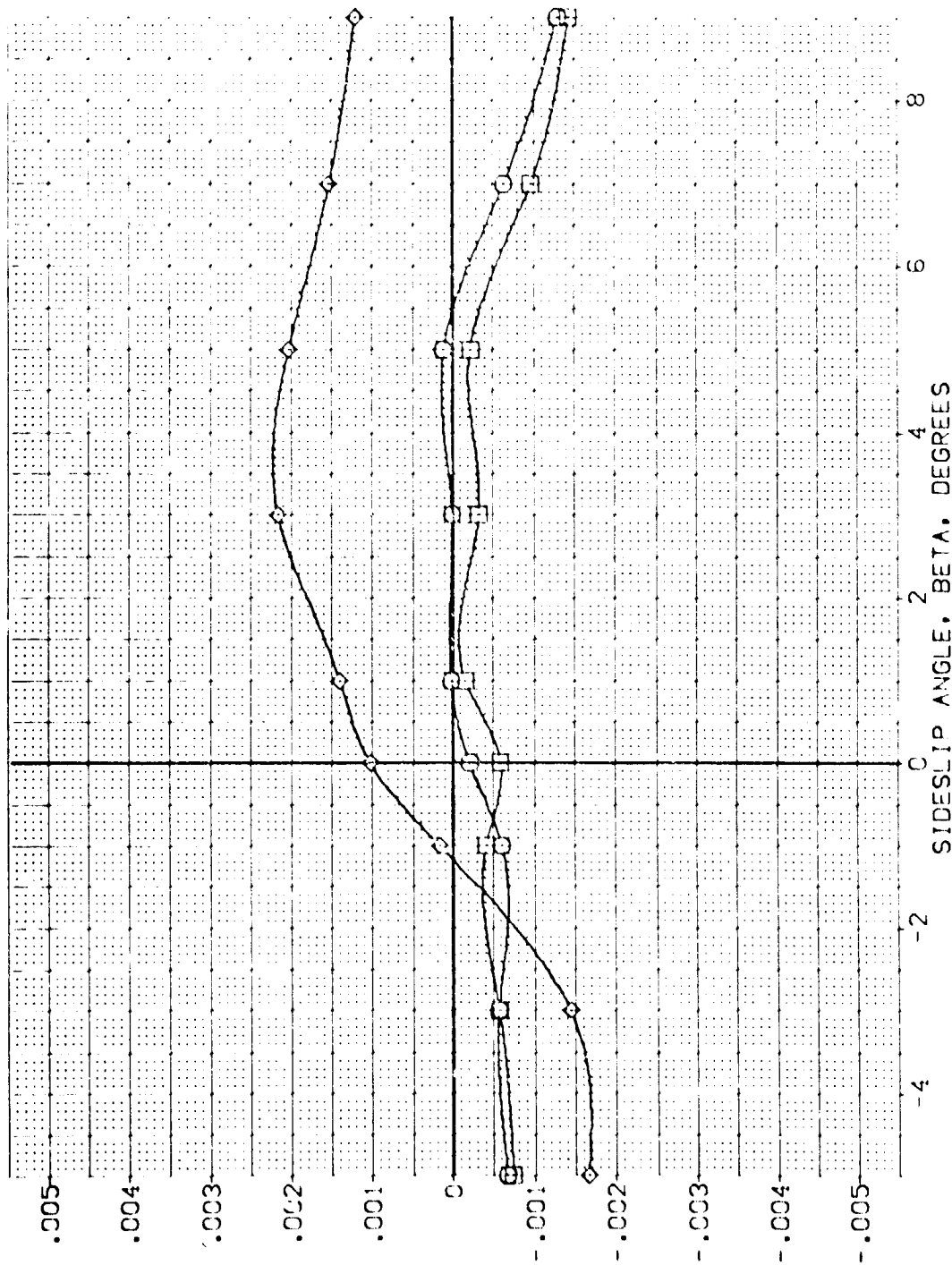
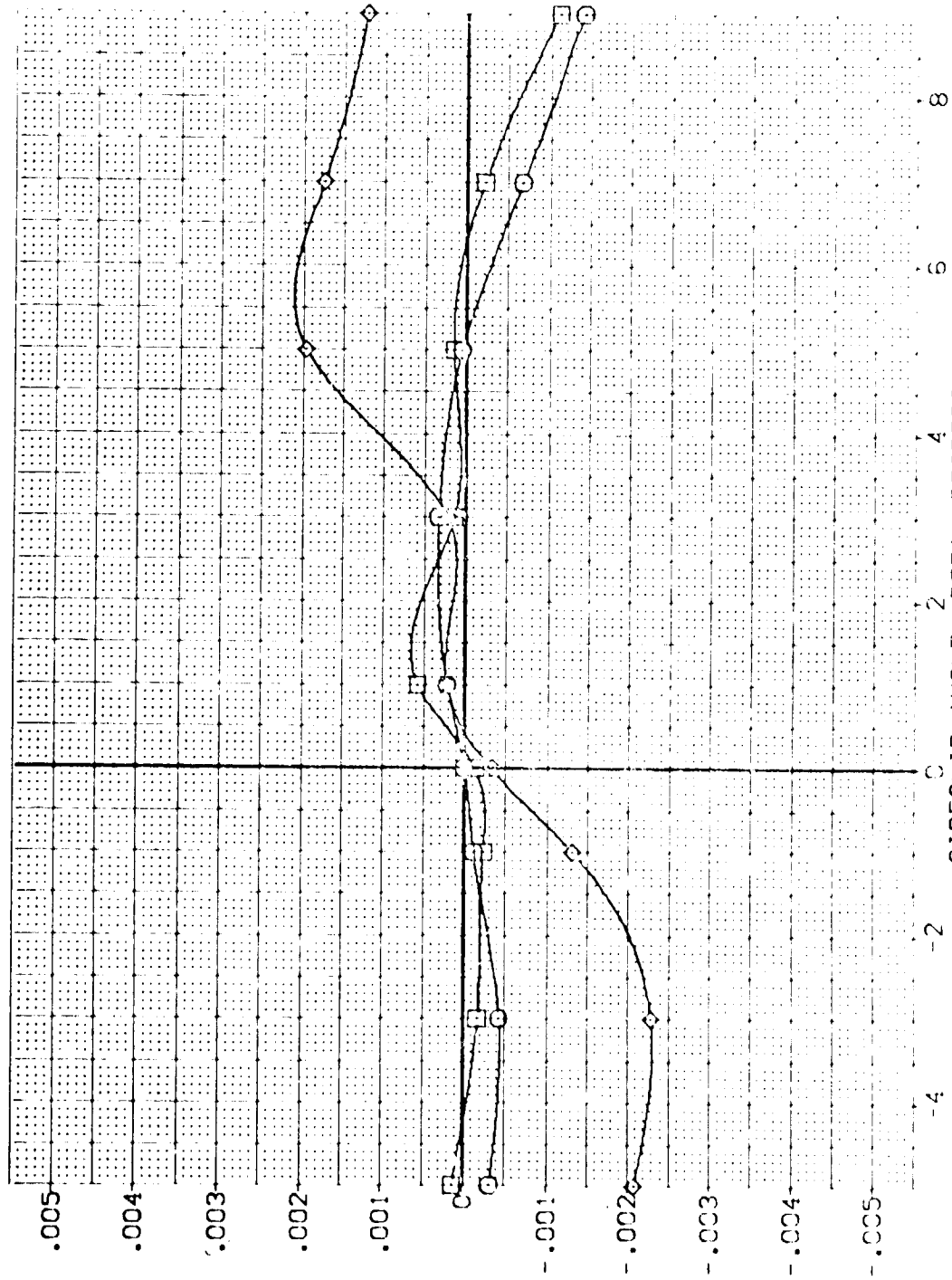


FIG. 26 INCREMENTAL SPEEDBRAKE EFFECTS (DSB= 55 - 25)

(A) VACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BDFLAG	ELEVON	REFERENCE INFORMATION
[VEJ025]	ARC 11-747 DAS3A B C M F VI	.000	.000	-11.700	.000	SREF 2.4210 SQ.FT.
[VEJ026]	ARC 11-747 DAS3A B C M F VI	10.000	.000	-11.700	.000	LREF 14.2440 IN.
[VEJ027]	ARC 11-747 DAS3A B C M F VI	20.000	.000	-11.700	.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP 11.0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300



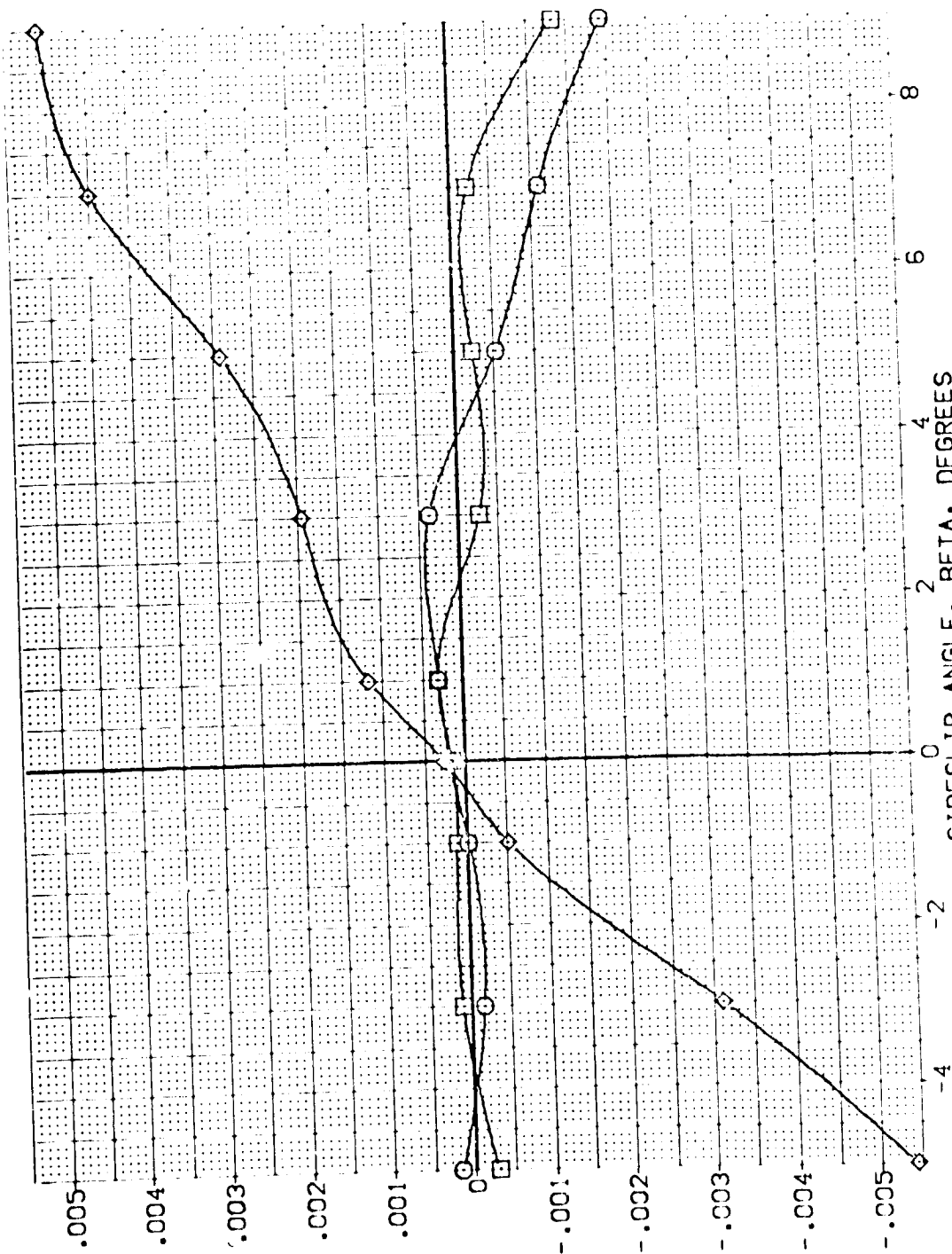
INCREMENTAL ROLLING MOMENT COEFFICIENT, DCBL

FIG. 26 INCREMENTAL SPEEDBRAKE EFFECTS (OSB= 55 - 25)

(B)MAC = .80

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA RUDDER BOFLAP ELEVON REFERENCE INFORMATION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	ELEVON	REFERENCE INFORMATION
[VEJ025]	ARC 11-747 BA53A B C M F V1 V	.000	.000	-11.700	.000	SREF 2.4210 SQ. FT.
[VEJ026]	ARC 11-747 BA53A B C M F V1 V	10.000	.000	-11.700	.000	LREF 14.2440 IN.
[VEJ027]	ARC 11-747 BA53A B C M F V1 V	20.000	.000	-11.700	.000	BREF 28.1004 IN.
						XREF 32.3010 IN.
						YREF .0000 IN.
						ZREF 11.2500 IN.
						SCALE .0300 IN.



INCREMENTAL ROLLING MOMENT COEFFICIENT, DCBL

FIG. 26 INCREMENTAL SPEEDBRAKE EFFECTS (DSB= 55 - 25)

(C)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	ELEVON	REFERENCE INFORMATION
{VE-025}	ARC 11-747 0A53A B C M F V1 V	.000	.000	-11.700	.000	SREF 2.4210 SQ.FT.
{VE-026}	ARC 11-747 0A53A B C M F V1 V	10.000	.000	-11.700	.000	LREF 14.2440 IN.
{VE-027}	ARC 11-747 0A53A B C M F V1 V	20.000	.000	-11.700	.000	BREF 28.1004 IN.
						YMRP 32.3010 IN.
						ZMRP .0000 IN.
						SCALE 11.2500 IN.

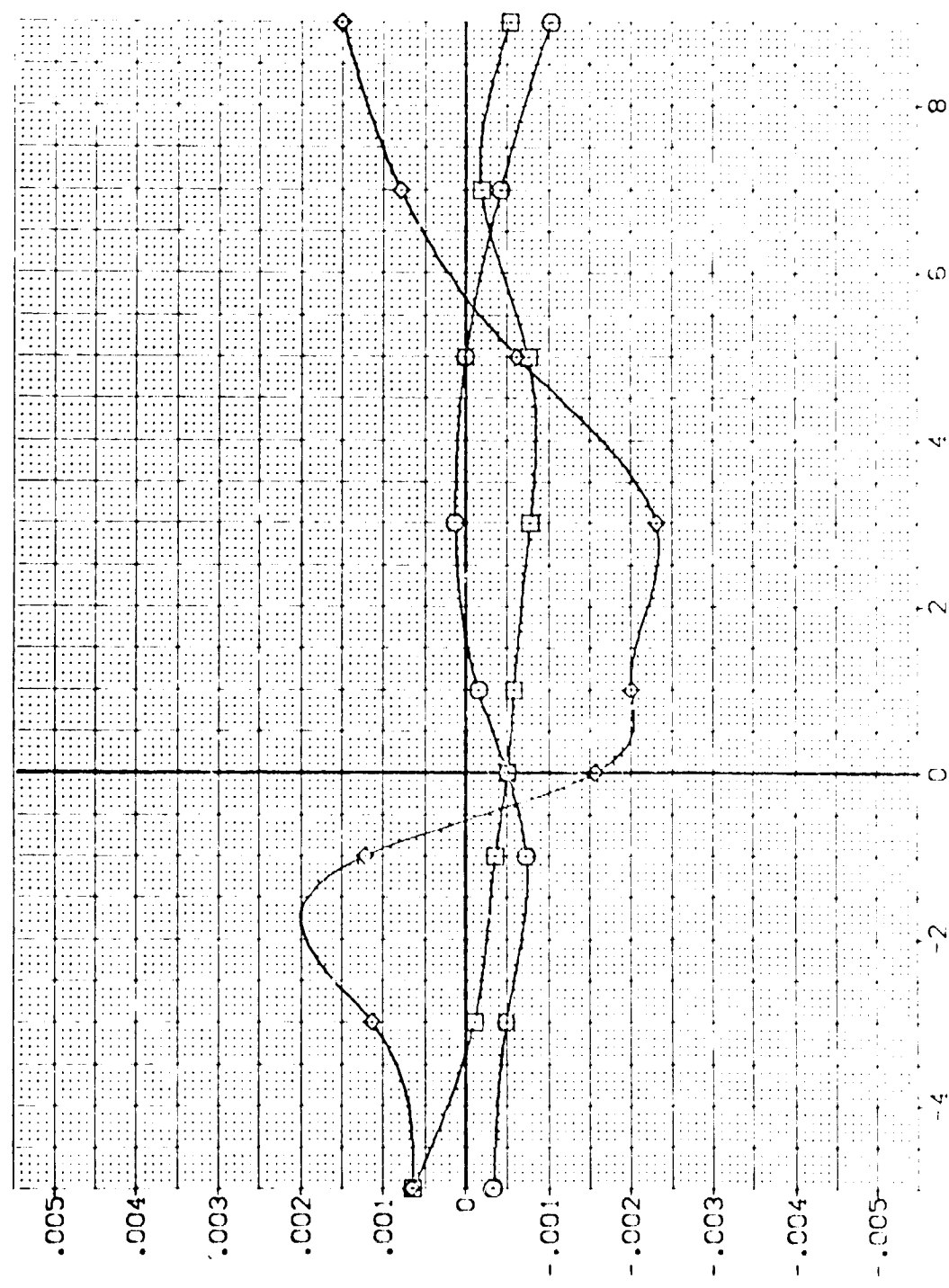


FIG. 26 INCREMENTAL SPEEDBRAKE EFFECTS (OSB= 55 - 25)

(C)MACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	ELEVON	REFERENCE INFORMATION
(VE4026)	ARC 11-747 DAS3A B C M F V I V	.000	.000	-11.700	.000	SREF 2.4210 SQ.FT.
(VE4026)	ARC 11-747 DAS3A B C M F V I V	10.000	.000	-11.700	.000	LREF 14.2440 IN.
(VE4027)	ARC 11-747 DAS3A B C M F V I V	20.000	.000	-11.700	.000	BREF 28.1004 IN.
						XREF 32.3010 IN.
						YREF 11.0000 IN.
						ZREF 11.2500 IN.
						SCALE .0300

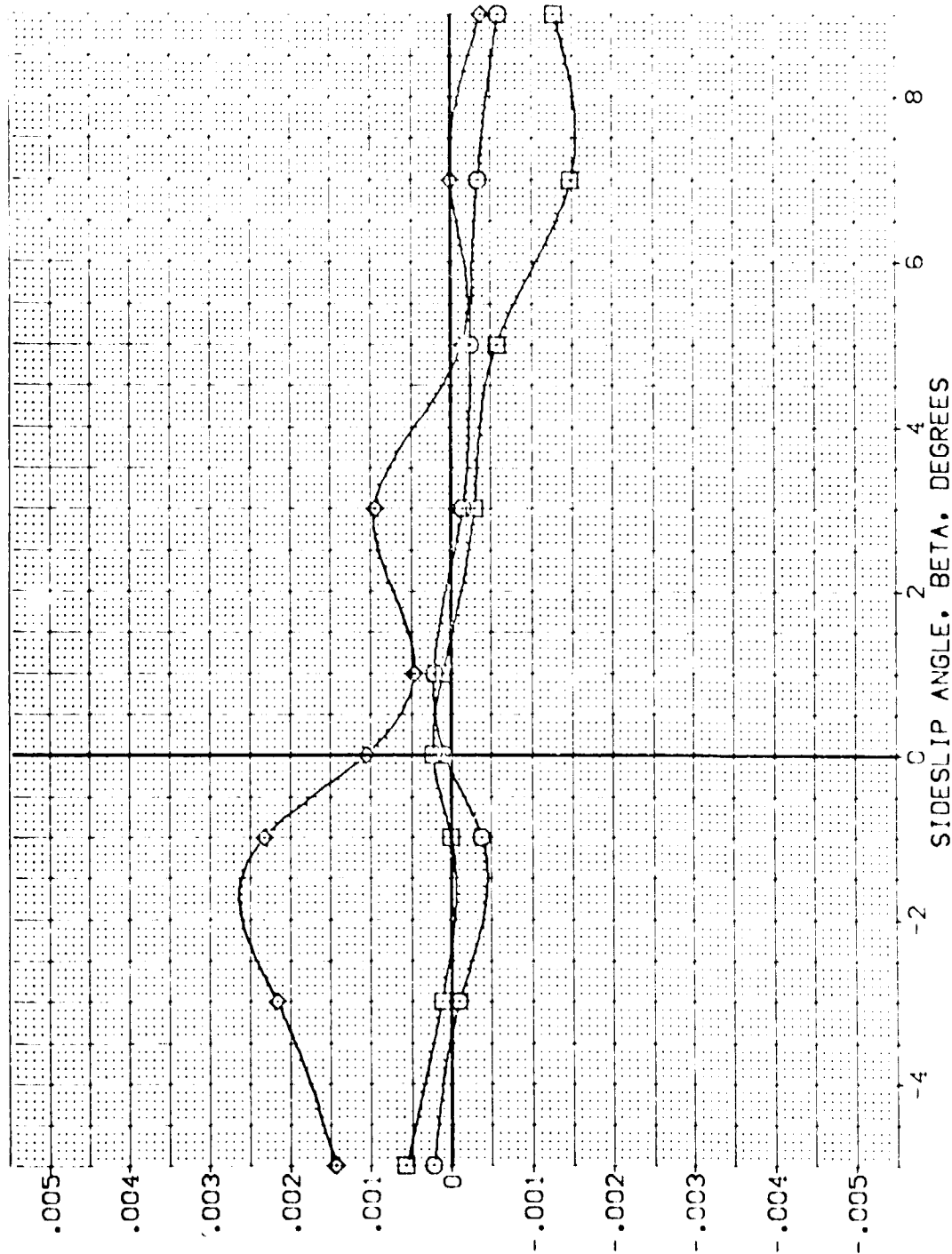


FIG. 26 INCREMENTAL SPEEDBRAKE EFFECTS (DSB= 55 - 25)

(ED)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	ELEVON	REFERENCE INFORMATION
(VE-038)	APC 11-747 DA53A B C M F V1	0.000	0.000	-11.700	0.000	SPEED 2.4210 SQ. FT.
(VE-040)	APC 11-747 DA53A B C M F V1	10.000	0.000	-11.700	0.000	LREF 14.2440
(VE-041)	APC 11-747 DA53A B C M F V1	20.000	0.000	-11.700	0.000	BREF 28.1000
						YREF 32.3010
						YREF 0.0000
						ZREF 11.2500
						SCALE 0.0000

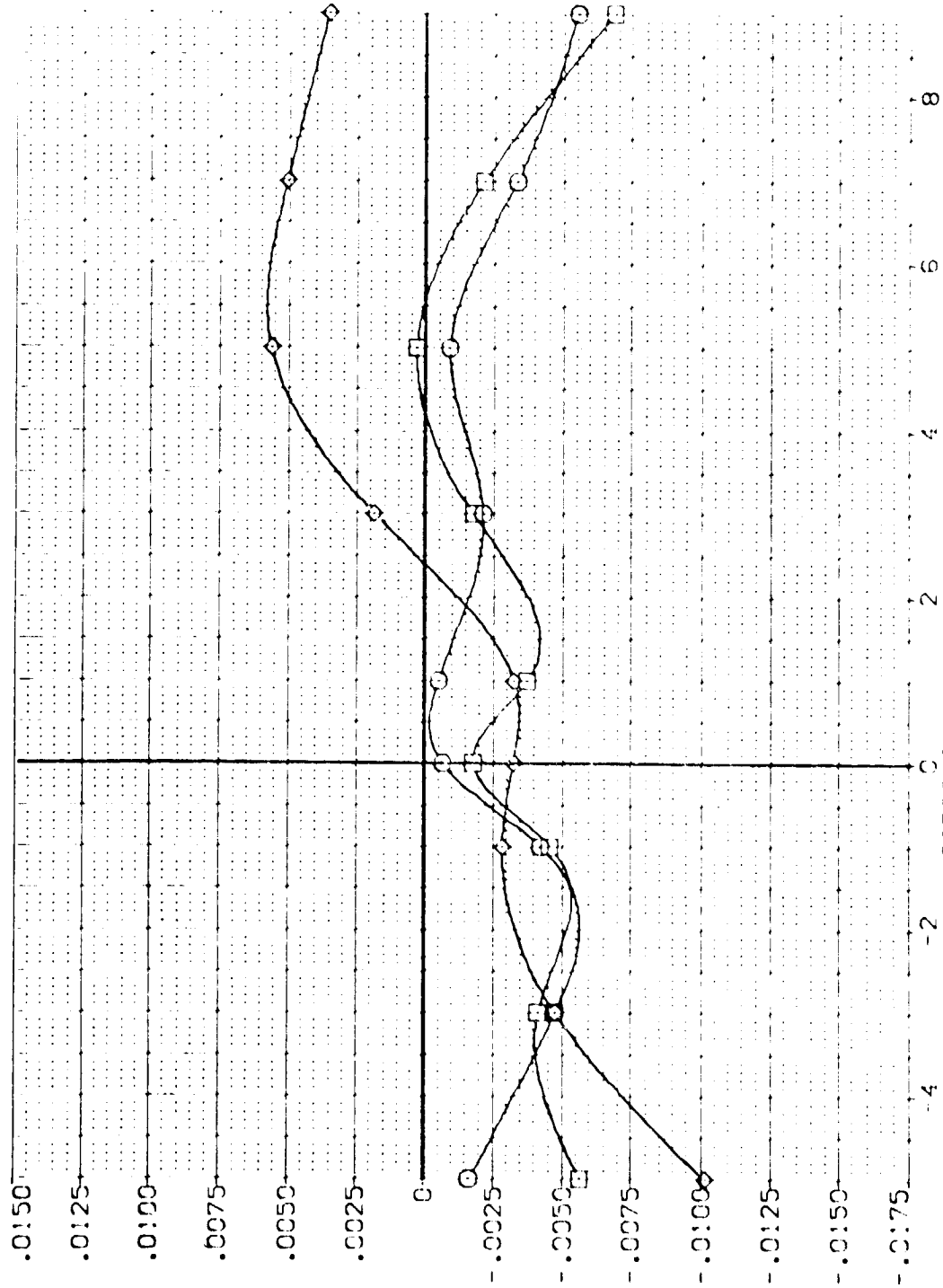


FIG. 27 INCREMENTAL SPEEDBRAKE EFFECTS, (OSB= 85 -25)

(A) MACH = .60



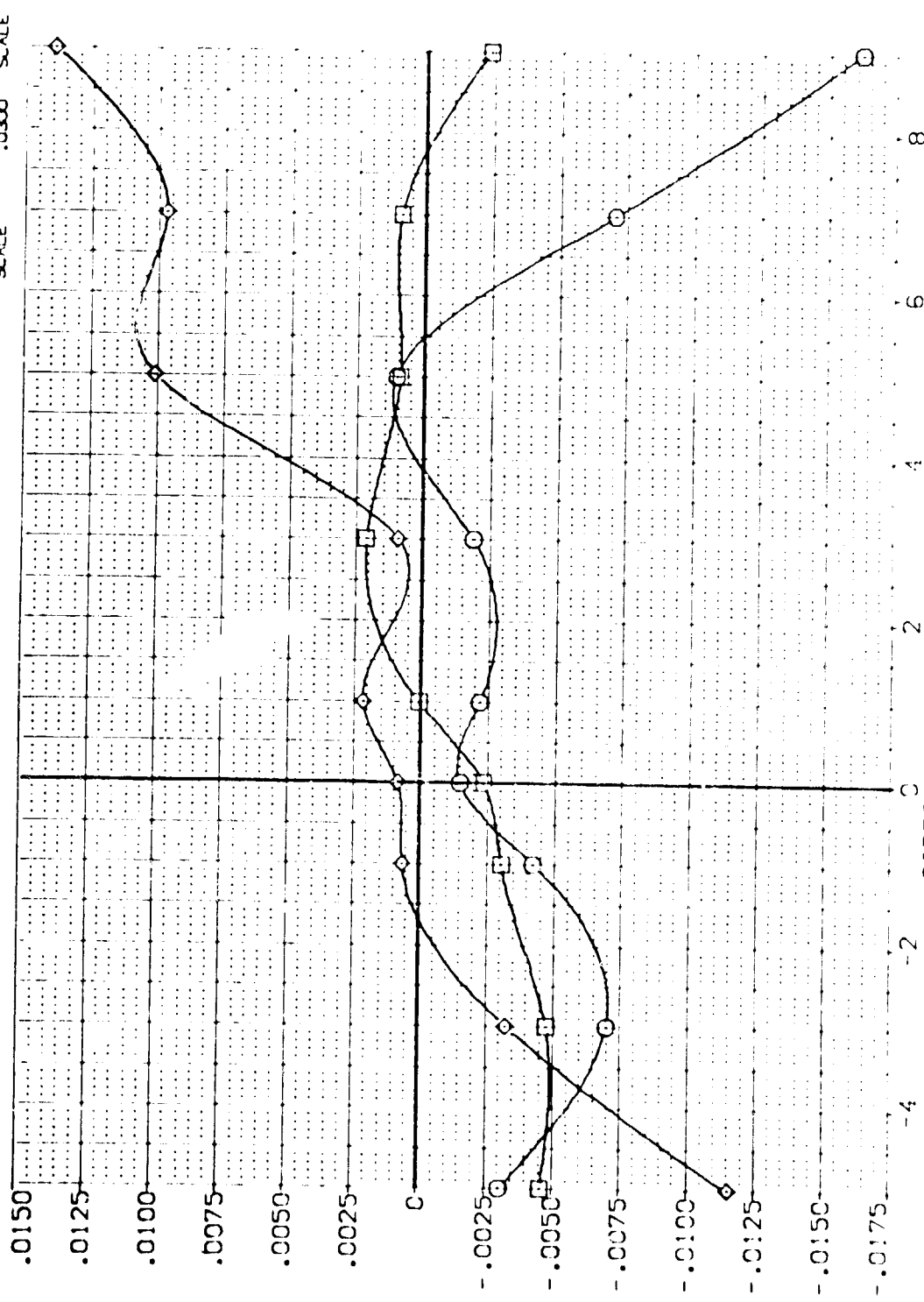
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDLER	BOFLAP	ELEVON	REFERENCE INFORMATION
(VEJ009)	ARC 11-747 0453A B C H F V I V	.000	.000	-11.700	.000	SREF 2.4210 SQ.FT.
(VEJ040)	ARC 11-747 0453A B C H F V I V	10.000	.000	-11.700	.000	LREF 14.2440 IN.
(VEJ041)	ARC 11-747 0453A B C H F V I V	20.000	.000	-11.700	.000	BREF 28.1004 IN.
						YREF 32.3010 IN.
						ZREF .0000 IN.
						YMAC 11.2500 SCALE
						ZMAC .0300 SCALE



FIG. 27 INCREMENTAL SPEEDBRAKE EFFECTS, (OSB= 85 -25)

(B)MAC = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOF LAP	ELEVON	REFERENCE INFORMATION
(VEJ038)	ARC 11-747 DA53A B C M F V	.000	.000	-11.700	.000	SREF 2.4210 50. FT.
(VEJ040)	ARC 11-747 DA53A B C M F V	10.000	.000	-11.700	.000	LREF 14.2440 IN.
(VEJ041)	ARC 11-747 DA53A B C M F V	20.000	.000	-11.700	.000	BREF 28.1004 IN.
						XREF 32.3010 IN.
						YREF .0000 IN.
						ZREF 11.2500 IN.
						SCALE .0300

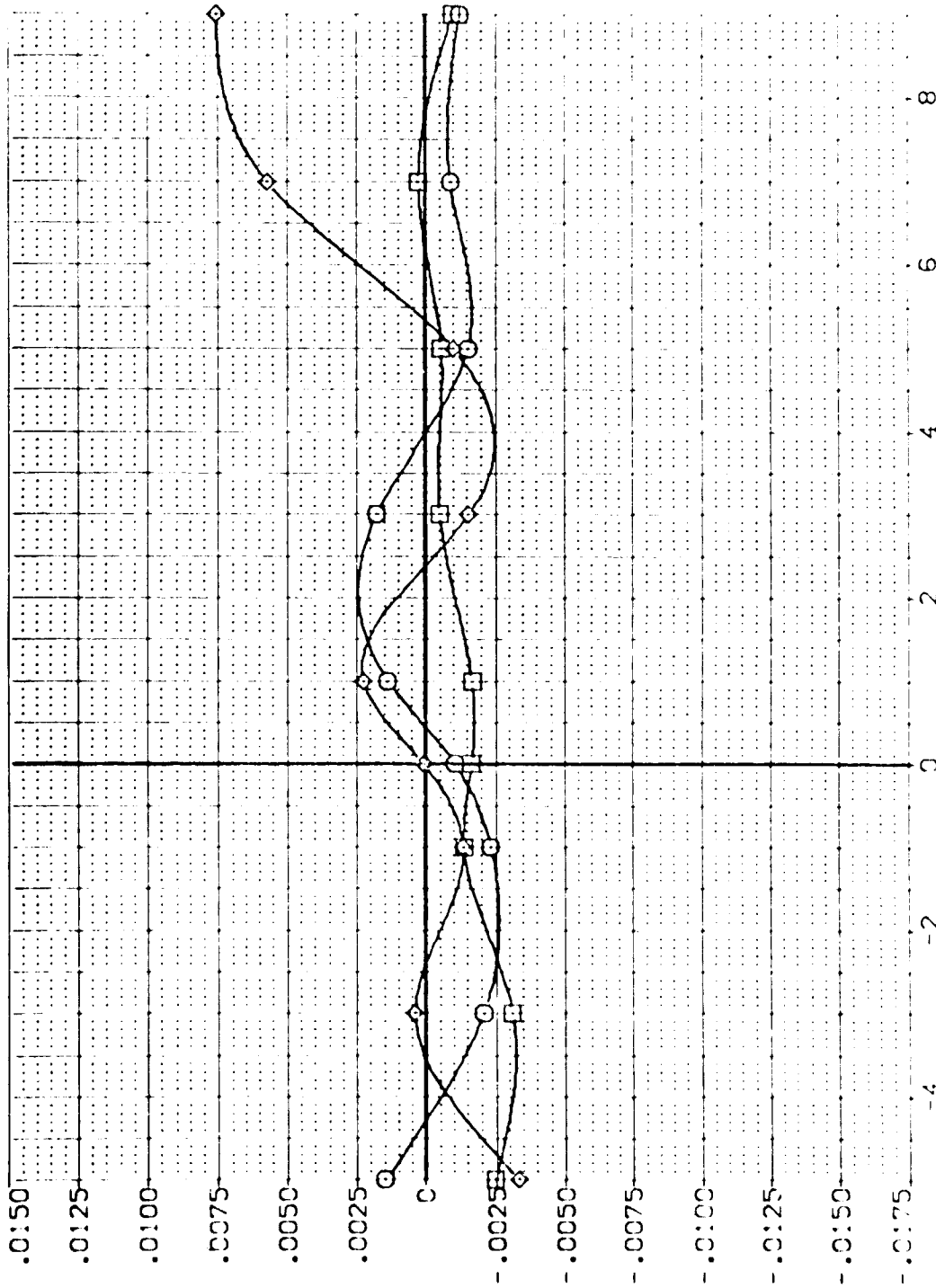


INCREMENTAL SIDE FORCE COEFFICIENT, DCY

FIG. 27 INCREMENTAL SPEEDBRAKE EFFECTS, (DSB= 85 -25)

(COMACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BD FLAP	ELEVON	REFERENCE INFORMATION
[VEJ039]	ARC 11-747 DA53A B C H F V	.000	.000	-11.700	.000	SREF 2.4210 SQ.FT.
[VEJ040]	ARC 11-747 DA53A B C H F V	10.000	.000	-11.700	.000	LREF 14.2440 IN.
[VEJ041]	ARC 11-747 DA53A B C H F V	20.000	.000	-11.700	.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300



INCREMENTAL SIDE FORCE COEFFICIENT, DCY

FIG. 27 INCREMENTAL SPEEDBRAKE EFFECTS, (DSB= 85 -25)

(D)MAC= .05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BDF LAP	ELEVON	REFERENCE INFORMATION
[VE-008]	ARC 11-747 QAS3A B C H F V	.000	.000	-11.700	.000	SREF 2.4210 SQ.FT.
[VE-040]	ARC 11-747 QAS3A B C H F V	10.000	.000	-11.700	.000	LREF 14.2440 IN.
[VE-041]	ARC 11-747 QAS3A B C H F V	20.000	.000	-11.700	.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

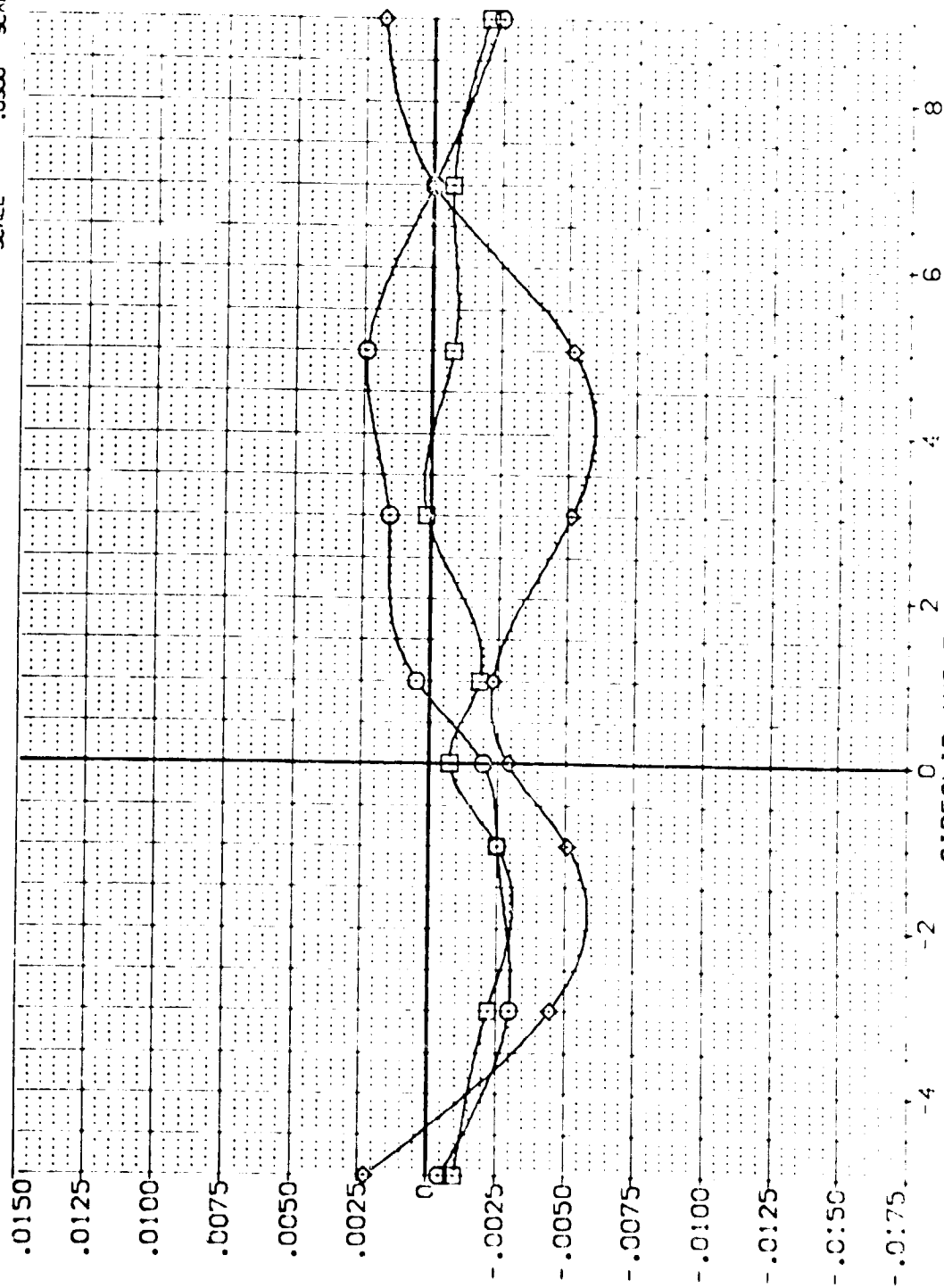


FIG. 27 INCREMENTAL SPEEDBRAKE EFFECTS, (DSB= 85 -75)

CEMACH = 1.20

DATA SET SYMBOL CONFIGURATION DESCRIPTION REFERENCE INFORMATION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	REFERENCE INFORMATION
(VEJ008)	ARC 11-747 OAS3A B C M F V	SREF 2.4210 SQ.FT.
(VEJ040)	ARC 11-747 OAS3A B C M F V	LREF 14.2440 IN.
(VEJ041)	ARC 11-747 OAS3A B C M F V	BREF 28.1004 IN.
		YREF 32.3010 IN.
		YREF 0.0000 IN.
		ZREF 11.2500 IN.
		SCALE 0.0000

ALPHA RUDDER BOFLAP ELEVON

ALPHA	RUDDER	BOFLAP	ELEVON
.000	.000	-11.700	.000
10.000	.000	-11.700	.000
20.000	.000	-11.700	.000

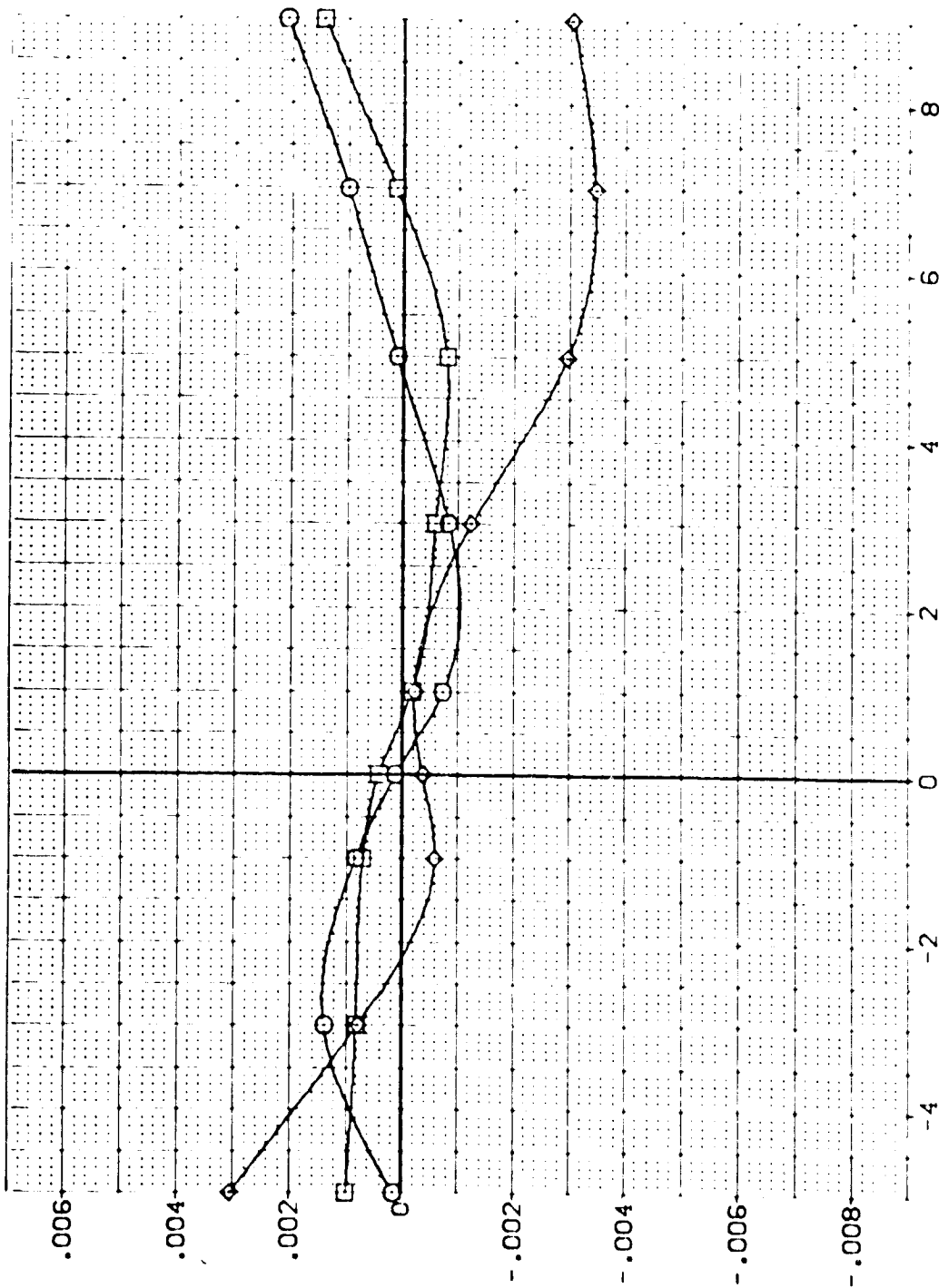


FIG. 27 INCREMENTAL SPEEDBRAKE EFFECTS, (OSB= 85 -25)

(A)MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDER	BOFLAP	ELEVON	REFERENCE INFORMATION
(VEJ039)	ARC 11-747 OAS3A B C M F VI V	.000	.000	-11.700	.000	SREF 2.4210 SQ.FT.
(VEJ040)	ARC 11-747 OAS3A B C M F VI V	10.000	.000	-11.700	.000	UREF 14.2440 IN.
(VEJ041)	ARC 11-747 OAS3A B C M F VI V	20.000	.000	-11.700	.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

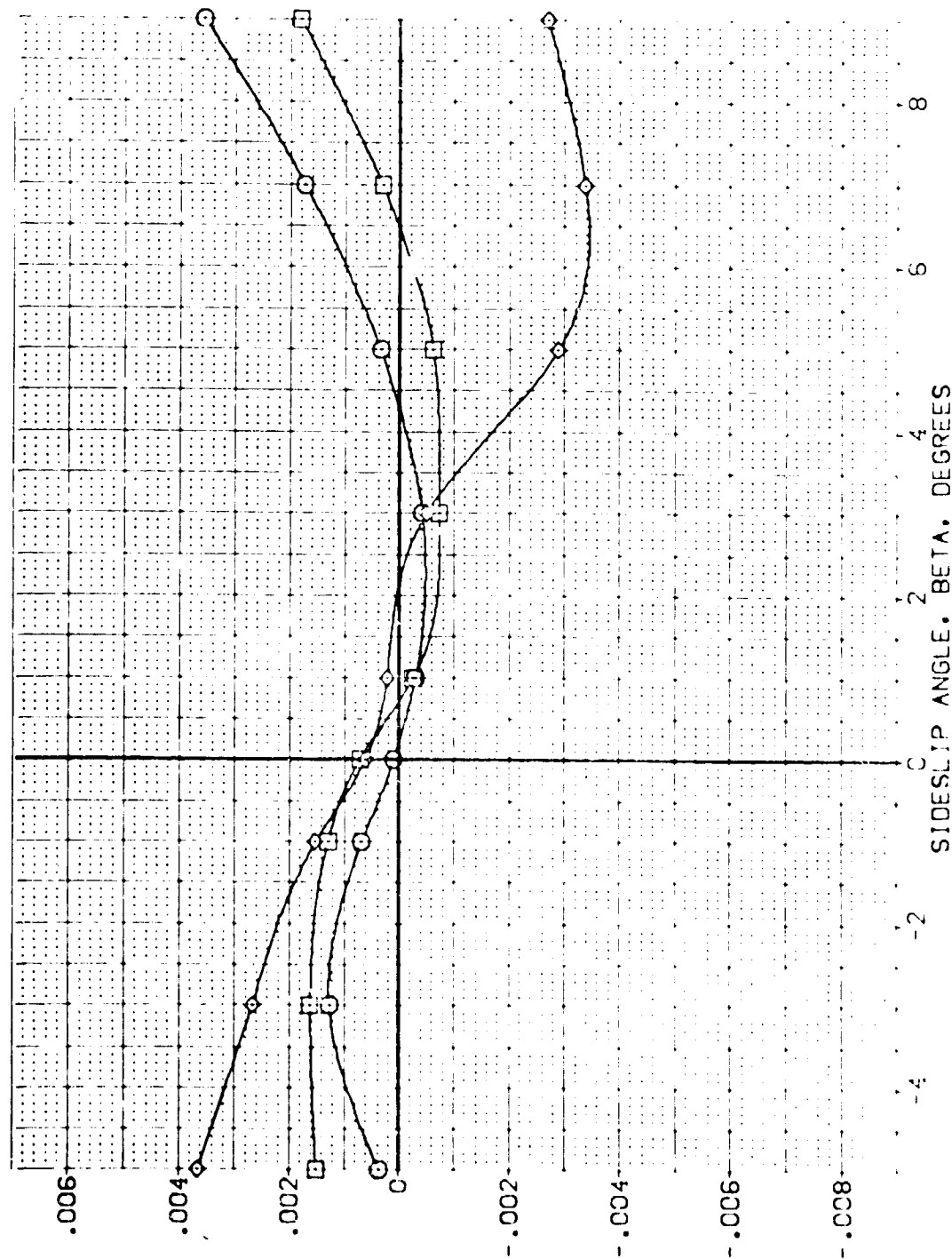


FIG. 27 INCREMENTAL SPEEDBRAKE EFFECTS, (DSB= 85 -25)

(B)MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	ELEVON	REFERENCE INFORMATION
(VEJ038)	ARC 11-747 DAS3A B C M F VI V	.000	.000	-11.700	.000	SREF 2.4210 SQ.FT.
(VEJ040)	ARC 11-747 DAS3A B C M F VI V	10.000	.000	-11.700	.000	LREF 14.2440 IN.
(VEJ041)	ARC 11-747 DAS3A B C M F VI V	20.000	.000	-11.700	.000	BREF 28.1004 IN.
						YREF 32.3010 IN.
						YREF 11.0000 IN.
						ZREF 11.2500 IN.
						SCALE .0300

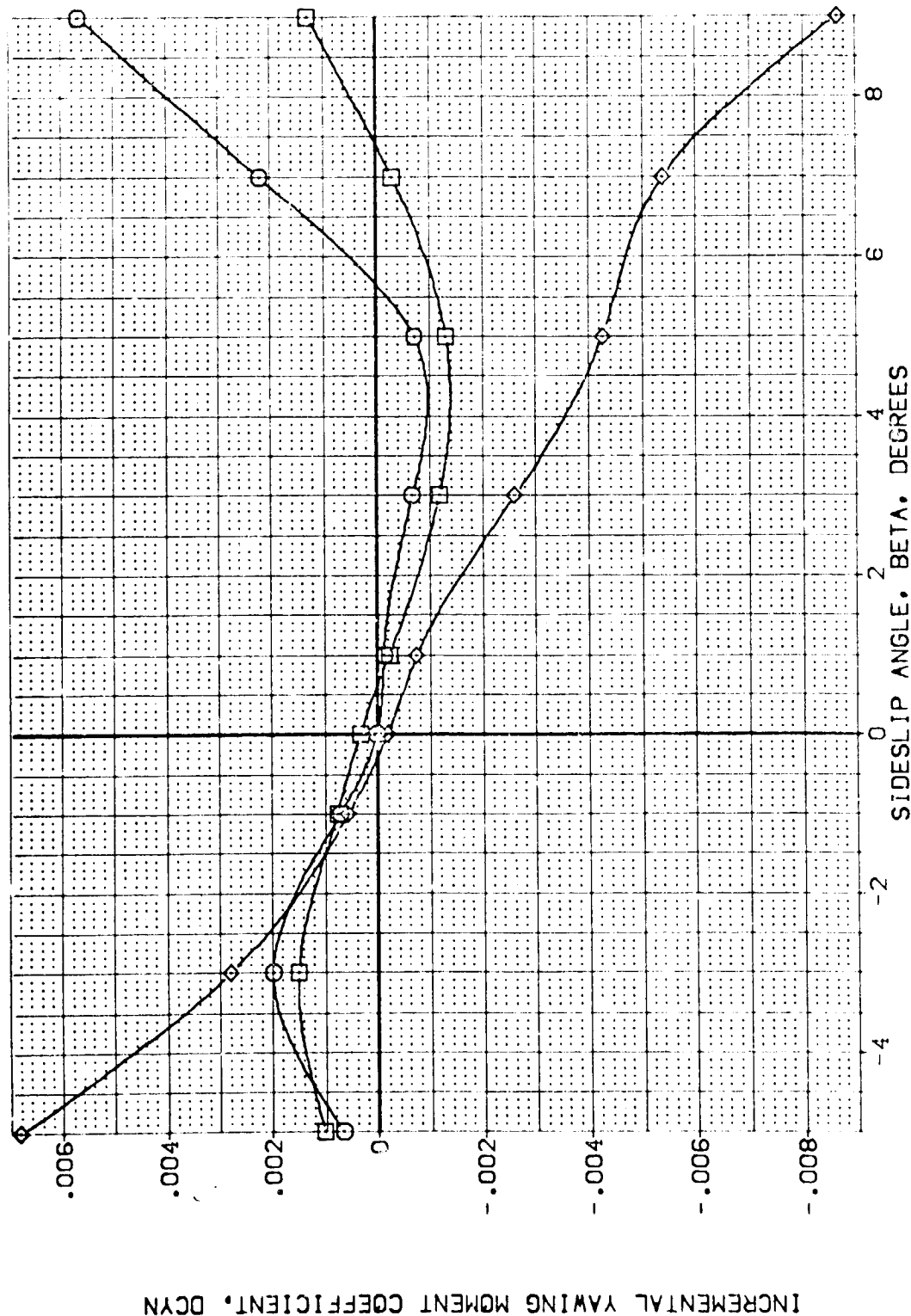


FIG. 27 INCREMENTAL SPEEDBRAKE EFFECTS, (DSB= 85 -25)

(C)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	ELEVON	REFERENCE INFORMATION
(VEJ009)	ARC 11-747 DAS3A B C H F VI V	.000	.000	-11.700	.000	SREF 2.4210 SQ.FT.
(VEJ040)	ARC 11-747 DAS3A B C H F VI V	10.000	.000	-11.700	.000	LREF 14.2440 IN.
(VEJ041)	ARC 11-747 DAS3A B C H F VI V	20.000	.000	-11.700	.000	BREF 28.1004 IN.
						XMREF 32.3010 IN.
						YMREF .0000 IN.
						ZMREF 11.2500 IN.
						SCALE .0300

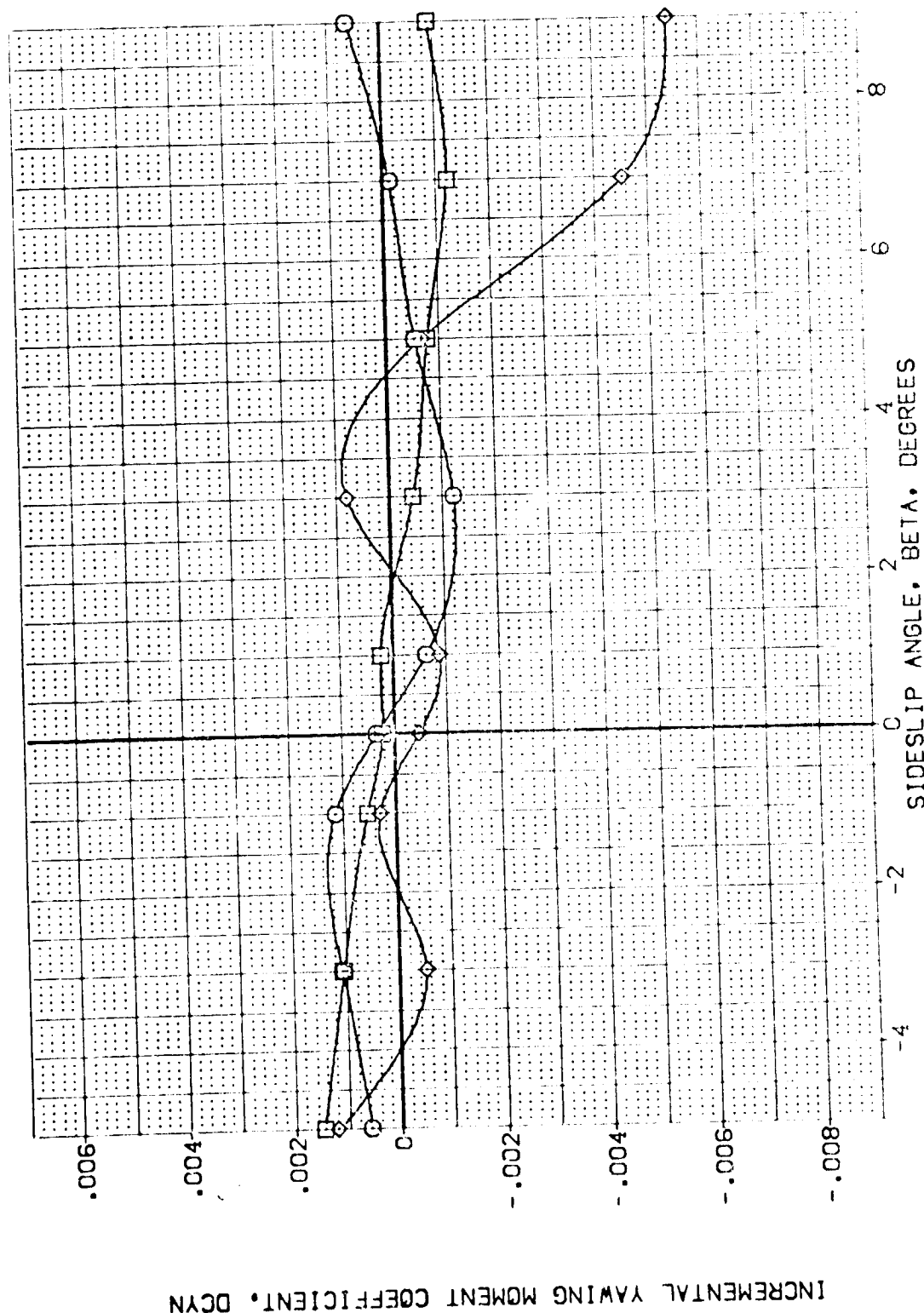


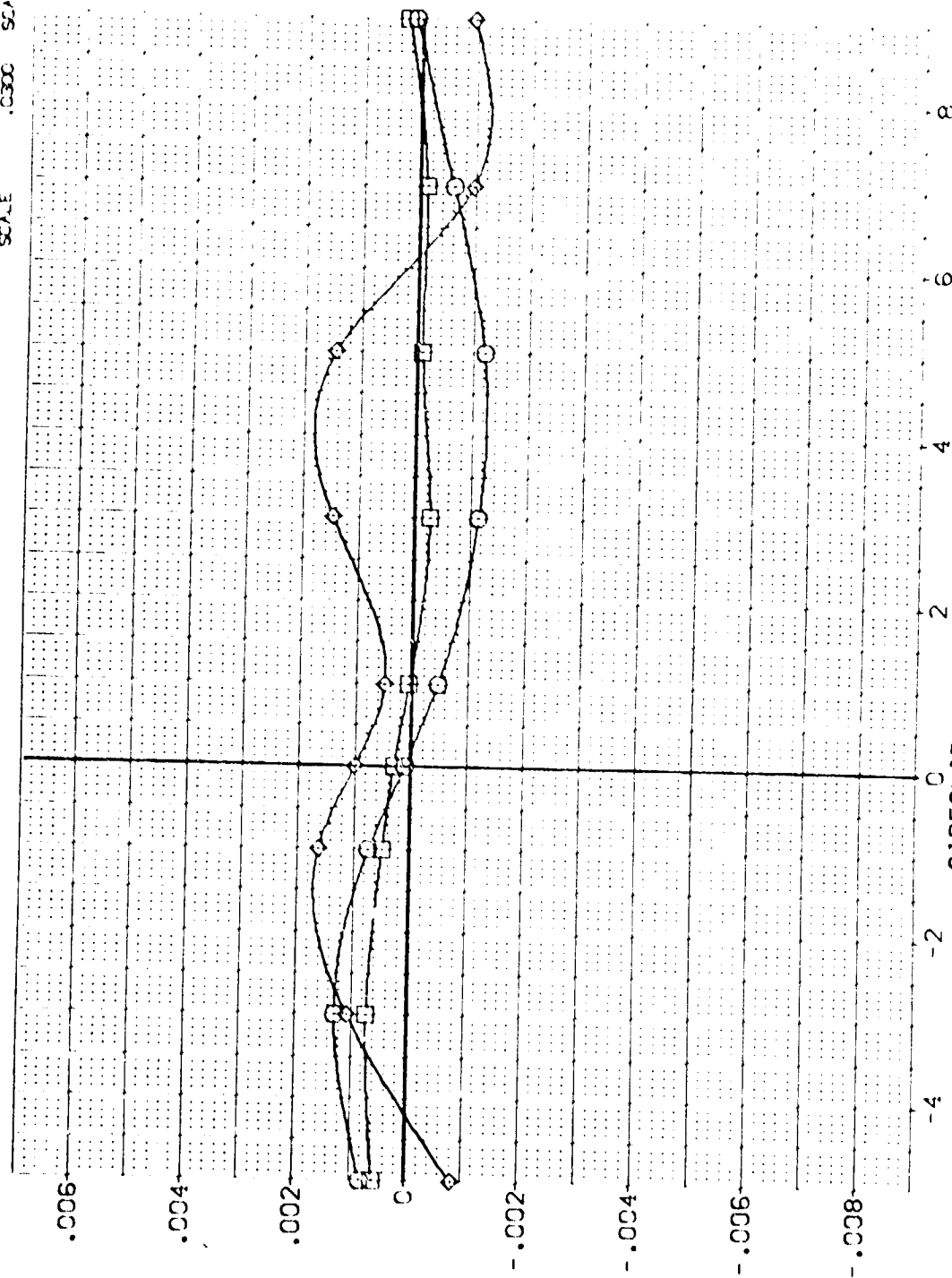
FIG. 27 INCREMENTAL SPEEDBRAKE EFFECTS, (DSB= 85 -25)

(D)MACH = 1.05



DATA SET SYMBOL    CONFIGURATION DESCRIPTION    ALPHA    RUDDER    BOFLAP    ELEVON    REFERENCE INFORMATION

VEJ003	ARC 11-747	GA33A	B	C	M	F	V	Y	NON	RVUL	ALPHA	RUDDER	BOFLAP	ELEVON	SREF	2.4210	50. FT.
VEJ040	ARC 11-747	GA33A	B <th>C</th> <th>M</th> <th>F</th> <th>V</th> <th>Y</th> <th>NON</th> <th>RVUL</th> <td>10.000</td> <td>.000</td> <td>-11.700</td> <td>.000</td> <td>LRP</td> <td>14.2440</td> <td></td>	C	M	F	V	Y	NON	RVUL	10.000	.000	-11.700	.000	LRP	14.2440	
VEJ041	ARC 11-747	GA33A	B <th>C</th> <th>M</th> <th>F</th> <th>V</th> <th>Y</th> <th>NON</th> <th>RVUL</th> <td>20.000</td> <td>.000</td> <td>-11.700</td> <td>.000</td> <td>BRP</td> <td>28.1000</td> <td></td>	C	M	F	V	Y	NON	RVUL	20.000	.000	-11.700	.000	BRP	28.1000	
												.000			YRP	32.9010	
												.000			ZRP	11.2500	
												.000			SCALE	.0300	



INCREMENTAL YAWING MOMENT COEFFICIENT, DCYN

FIG. 27 INCREMENTAL SPEEDBRAKE EFFECTS, (DSB= 85 -25)

CE040 = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	ELEVON	REFERENCE INFORMATION
[VEJ038]	ARC 11-747 QAS3A B C M F VI V	.000	.000	-11.700	.000	SREF 2.4210 SQ.FT.
[VEJ040]	ARC 11-747 QAS3A B C M F VI V	10.000	.000	-11.700	.000	LREF 14.2440 IN.
[VEJ041]	ARC 11-747 QAS3A B C M F VI V	20.000	.000	-11.700	.000	BREF 28.1004 IN.
						XMPR 32.3010 IN.
						YMPR .0000 IN.
						ZMPR 11.2500 IN.
						SCALE .0000

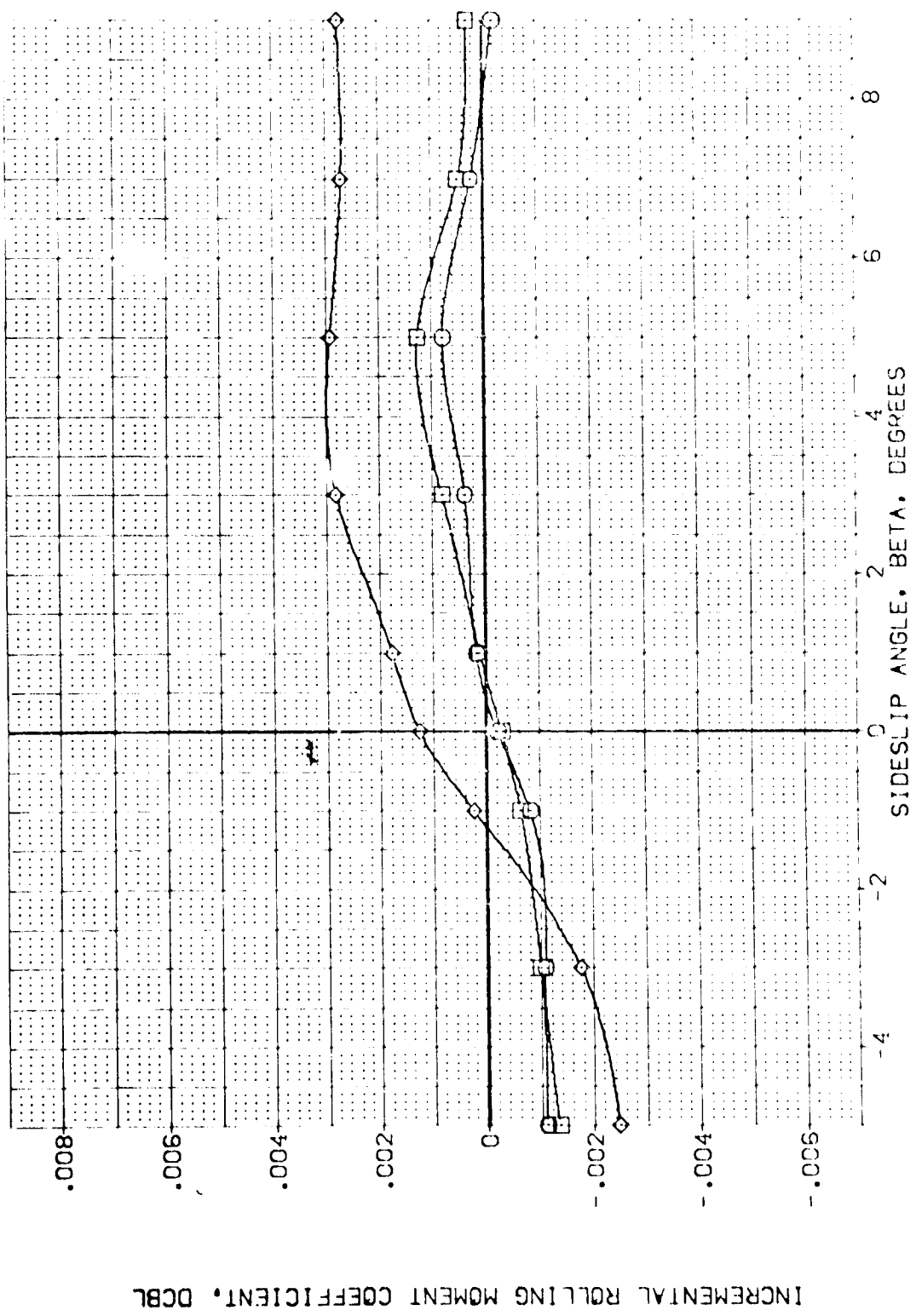
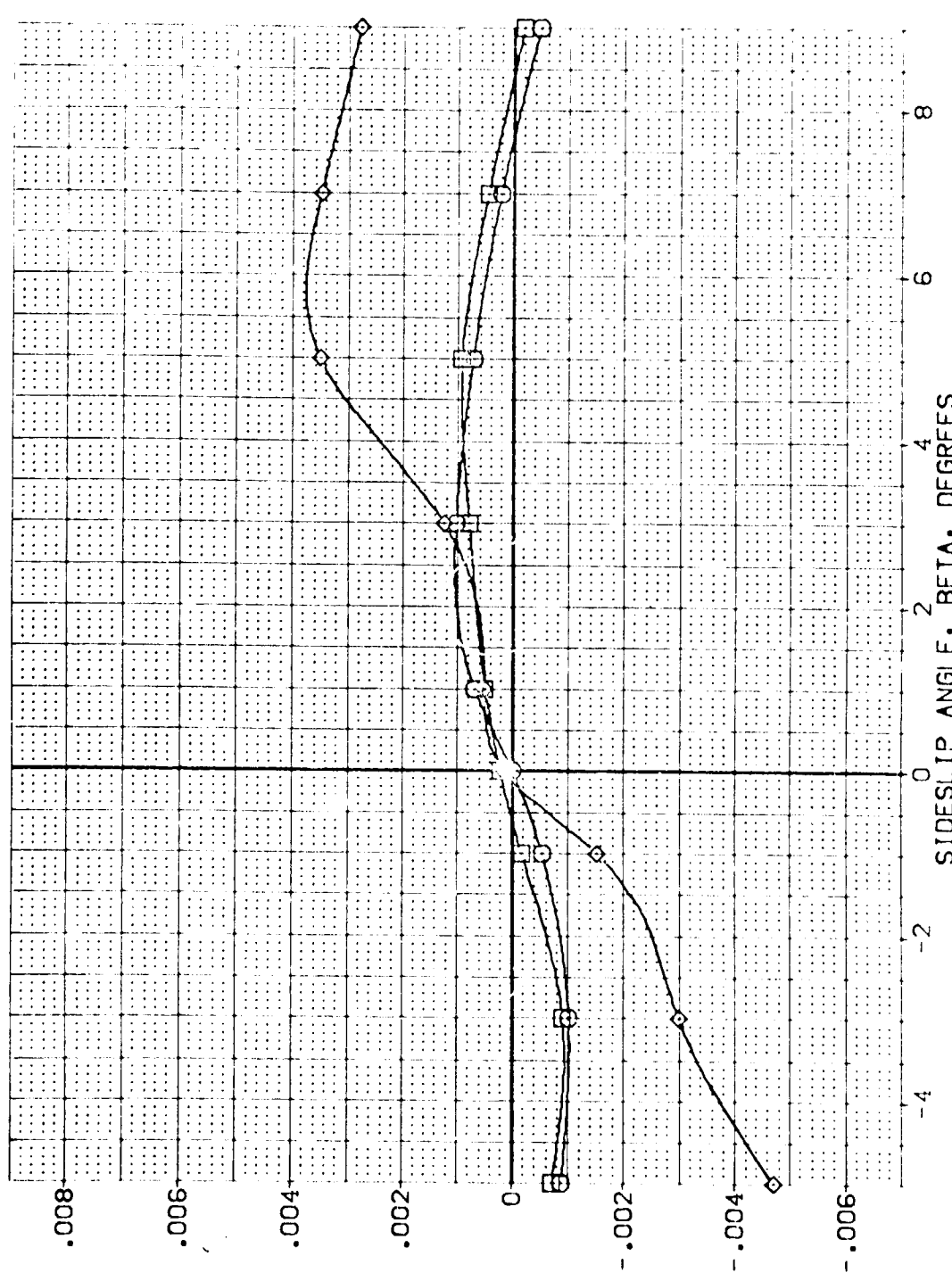


FIG. 27 INCREMENTAL SPEEDBRAKE EFFECTS, (OSB= 85 -25)

CADMAC = .50

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	ELEVON	REFERENCE INFORMATION
{VE4038}	ARC 11-747 DAS3A B C M F V1 V	.000	.000	-11.700	.000	SREF 2.4210 SQ.FT.
{VE4040}	ARC 11-747 DAS3A B C M F V1 V	10.000	.000	-11.700	.000	LREF 14.2440 IN.
{VE4041}	ARC 11-747 DAS3A B C M F V1 V	20.000	.000	-11.700	.000	BREF 28.1004 IN.
						XREF 32.3010 IN.
						YREF 11.0000 IN.
						ZREF 11.2500 IN.
						SCALE .0300

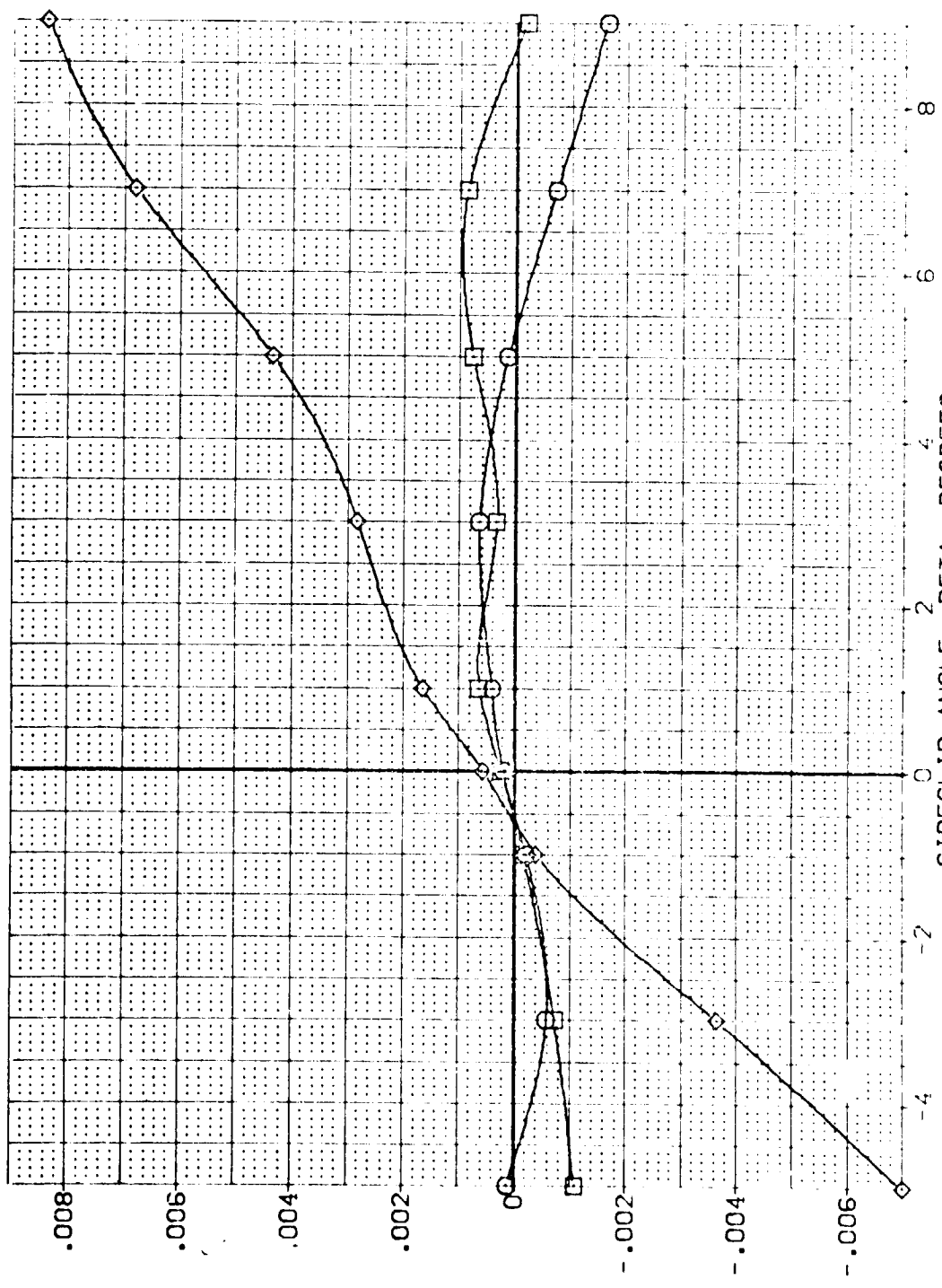


INCREMENTAL ROLLING MOMENT COEFFICIENT, DCBL

FIG. 27 INCREMENTAL SPEEDBRAKE EFFECTS, (DSB= 85 -25)

(B)MAC = .80

DATA SET SYMBOL: [VEJ038] [VEJ040] [VEJ041]  
 CONFIGURATION DESCRIPTION: ARC 11-747 DAS3A B C M F VI V; ARC 11-747 DAS3A B C M F VI V; ARC 11-747 DAS3A B C M F VI V  
 ALPHA: .000, 10.000, 20.000  
 RUDDER: .000, .000, .000  
 BOFLAP: -11.700, -11.700, -11.700  
 ELEVON: .000, .000, .000  
 REFERENCE INFORMATION: SREF 2.4210 50.FT.; LREF 14.2440 IN.; BREF 28.1004 IN.; XMRP 32.3010 IN.; YMRP .0000 IN.; ZMRP 11.2500 IN.; SCALE .0300



INCREMENTAL ROLLING MOMENT COEFFICIENT, DCBL

FIG. 27 INCREMENTAL SPEEDBRAKE EFFECTS, (DSB= 85 -25)

(C)MACH = .90

DATA SET SYMBOL: {VE:008} {VE:040} {VE:041}

CONFIGURATION DESCRIPTION: ARC 11-747 CAS3A B C H F VI V NON: RVAL  
 ARC 11-747 CAS3A B C H F VI V NON: RVAL  
 ARC 11-747 CAS3A B C H F VI V NON: RVAL

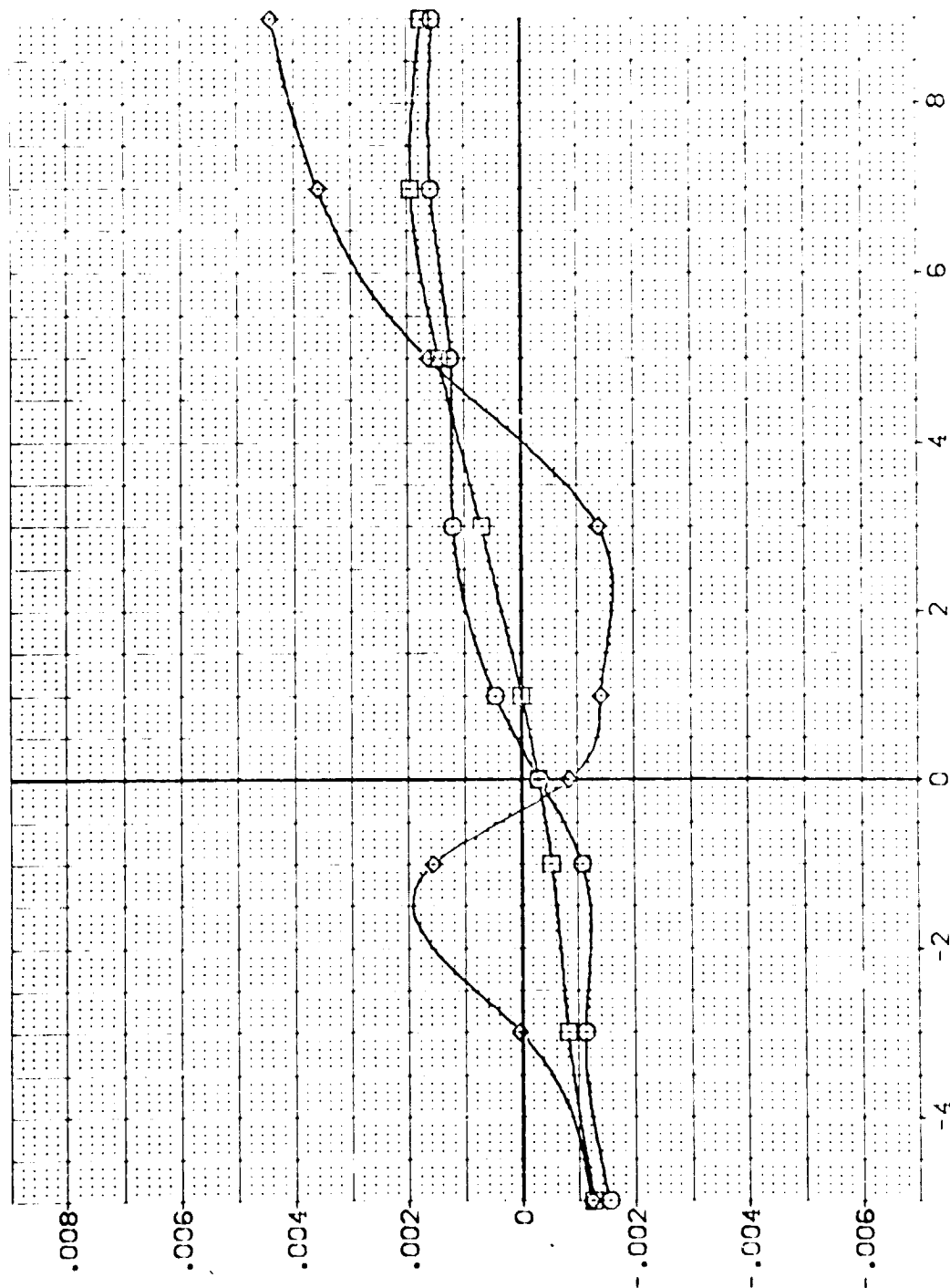
ALPHA: .000 10.000 20.000

RUDER: .000 .000 .000

BOFLAP: -11.700 -11.700 -11.700

ELEVON: .000 .000 .000

REFERENCE INFORMATION: SREF 2.4210 SQ.FT.  
 LREF 14.2442 N.  
 BREF 28.1004 N.  
 XMRP 32.3016 N.  
 YMRP .0000 N.  
 ZMRP 11.2500 N.  
 SCALE .0300



INCREMENTAL ROLLING MOMENT COEFFICIENT, DCBL

SIDSLIP ANGLE, BETA, DEGREES

FIG. 27 INCREMENTAL SPEEDBRAKE EFFECTS, (OSB= 85 -25)

(C)MACH = 1.05



SIDE FORCE COEFF. DERIV. WITH SPEED BRAKE DEFL., DCY/DS, PER DEG

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	ELEVON	REFERENCE INFORMATION
[VEJ025]	ARC -747 OA53A B C M F V	.000	.000	-11.700	.000	SREF 2.4210 SQ.FT.
[VEJ026]	ARC -747 OA53A B C M F V	10.000	.000	-11.700	.000	LRREF 14.2440 IN.
[VEJ027]	ARC -747 OA53A B C M F V	20.000	.000	-11.700	.000	BRREF 28.1004 IN.
						YREF 32.3010 IN.
						ZREF .0000 IN.
						YREF 11.2500 IN.
						ZREF .0000 IN.
						SCALE .0000

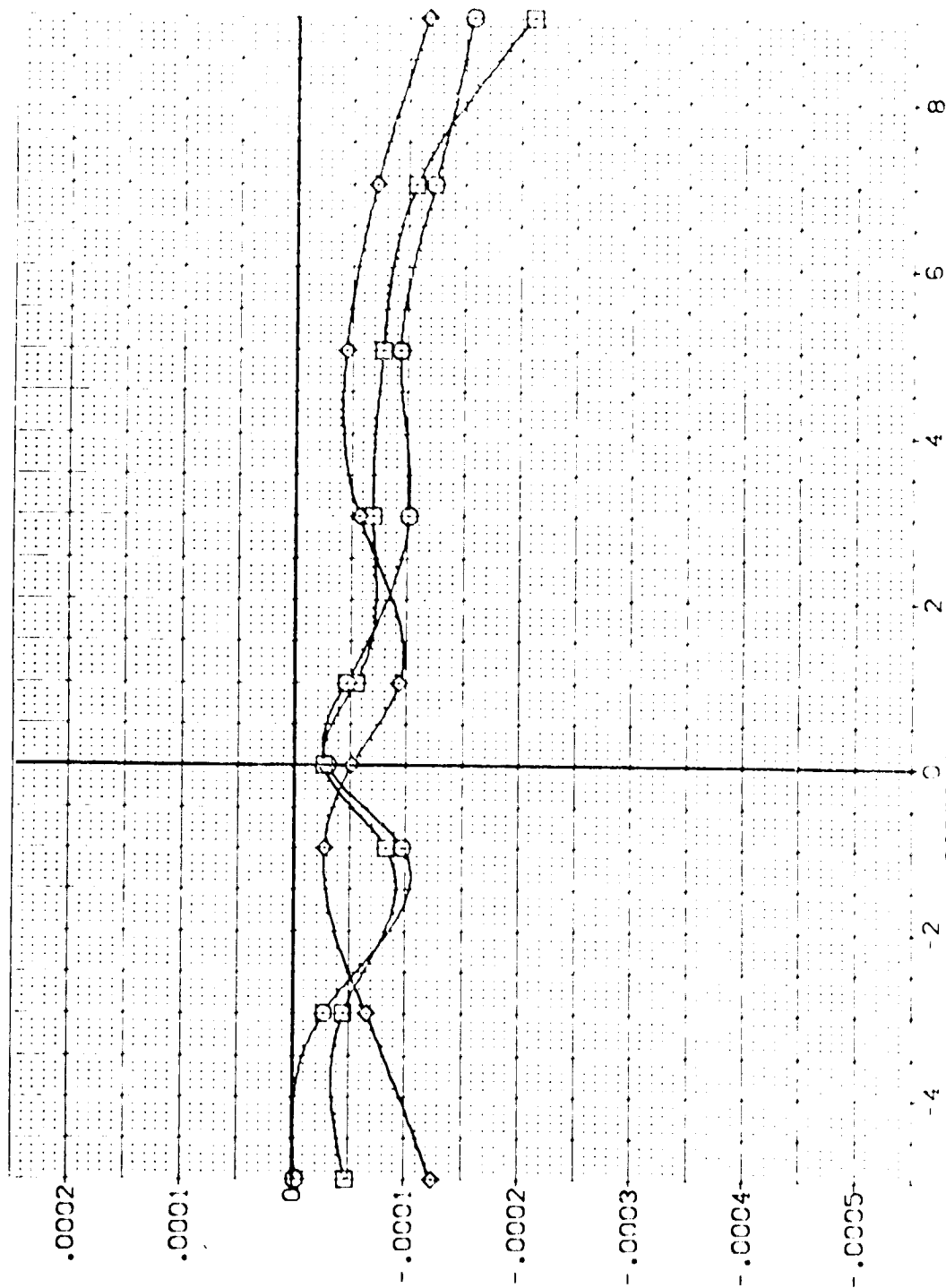


FIG. 28 SPEEDBRAKE DERIVATIVES, 55 DEGS. DEFLECT. (BASELINE = 25 DEGS.)

CAMAC = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	ELEVON	REFERENCE INFORMATION
(VEJ025)	ARC 11-747 B453A B C M F V	.000	.000	-11.700	.000	SREF 2.4210 SQ.FT.
(VEJ026)	ARC 11-747 B453A B C M F V	10.000	.000	-11.700	.000	LREF 14.2440 IN.
(VEJ027)	ARC 11-747 B453A B C M F V	20.000	.000	-11.700	.000	BREF 28.0004 IN.
						YREF 32.0010 IN.
						ZREF 11.0000 IN.
						SCALE 11.2500 IN.
						SCALE .0330

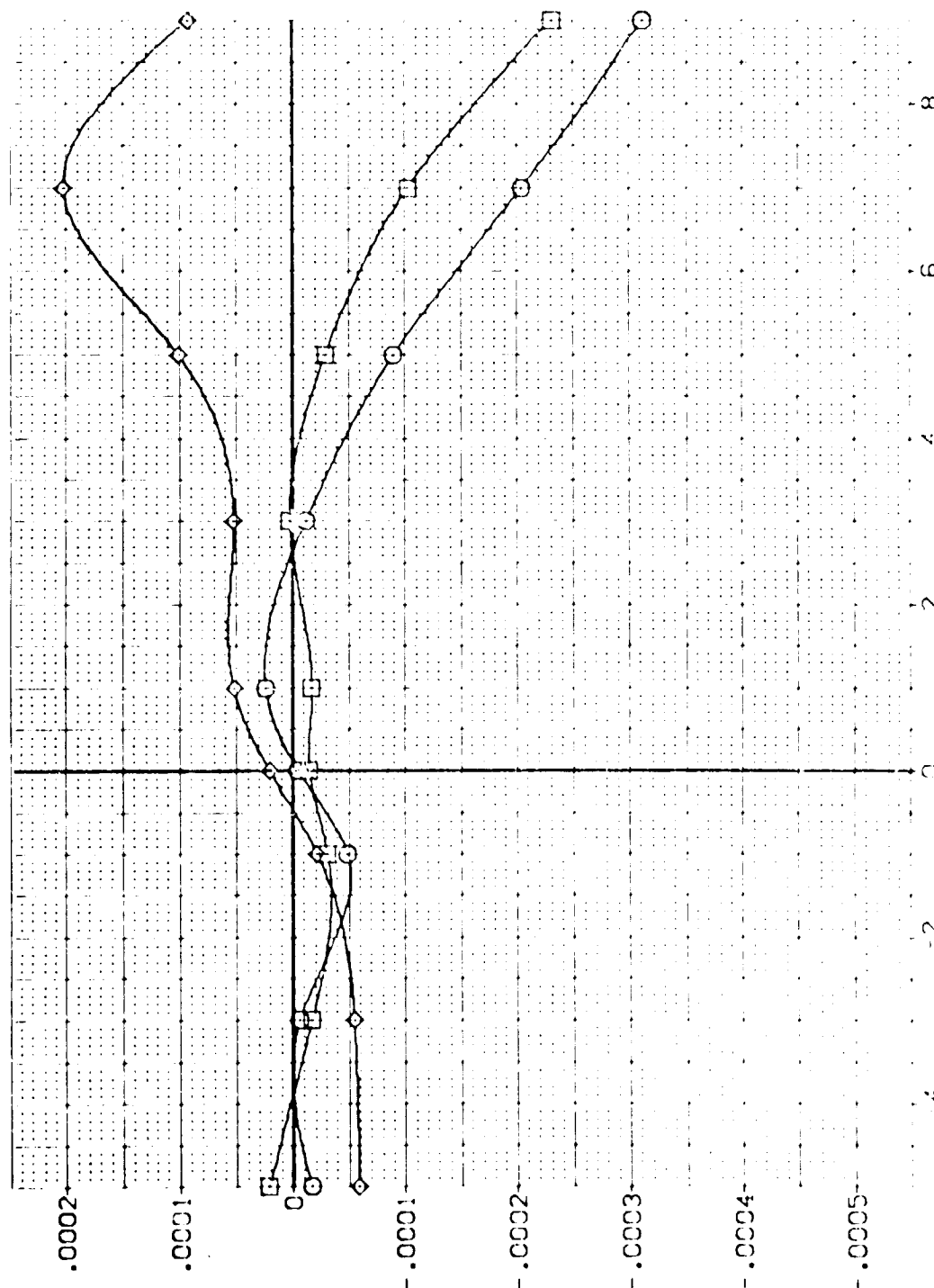


FIG. 28 SPEEDBRAKE DERIVATIVES, 55 DEGS. DEFLECT. (3/5 LINE = 25 DEGS.)



DATA SET SYMBOL: [VEJ075] [VEJ076] [VEJ077]  
 CONFIGURATION DESCRIPTION: ARC 11-747 DA53A B C M F V1 V NOM: RVL  
 ARC 11-747 DA53A B C M F V1 V NOM: RVL  
 ARC 11-747 DA53A B C M F V1 V NOM: RVL  
 REFERENCE INFORMATION: SREF 2.4210 SQ.FT.  
 LREF 14.2443 IN.  
 BREF 28.1004 IN.  
 XMRP 32.3010 IN.  
 YMRP 11.2500 IN.  
 ZMRP 11.2500 IN.  
 SCALE .0300

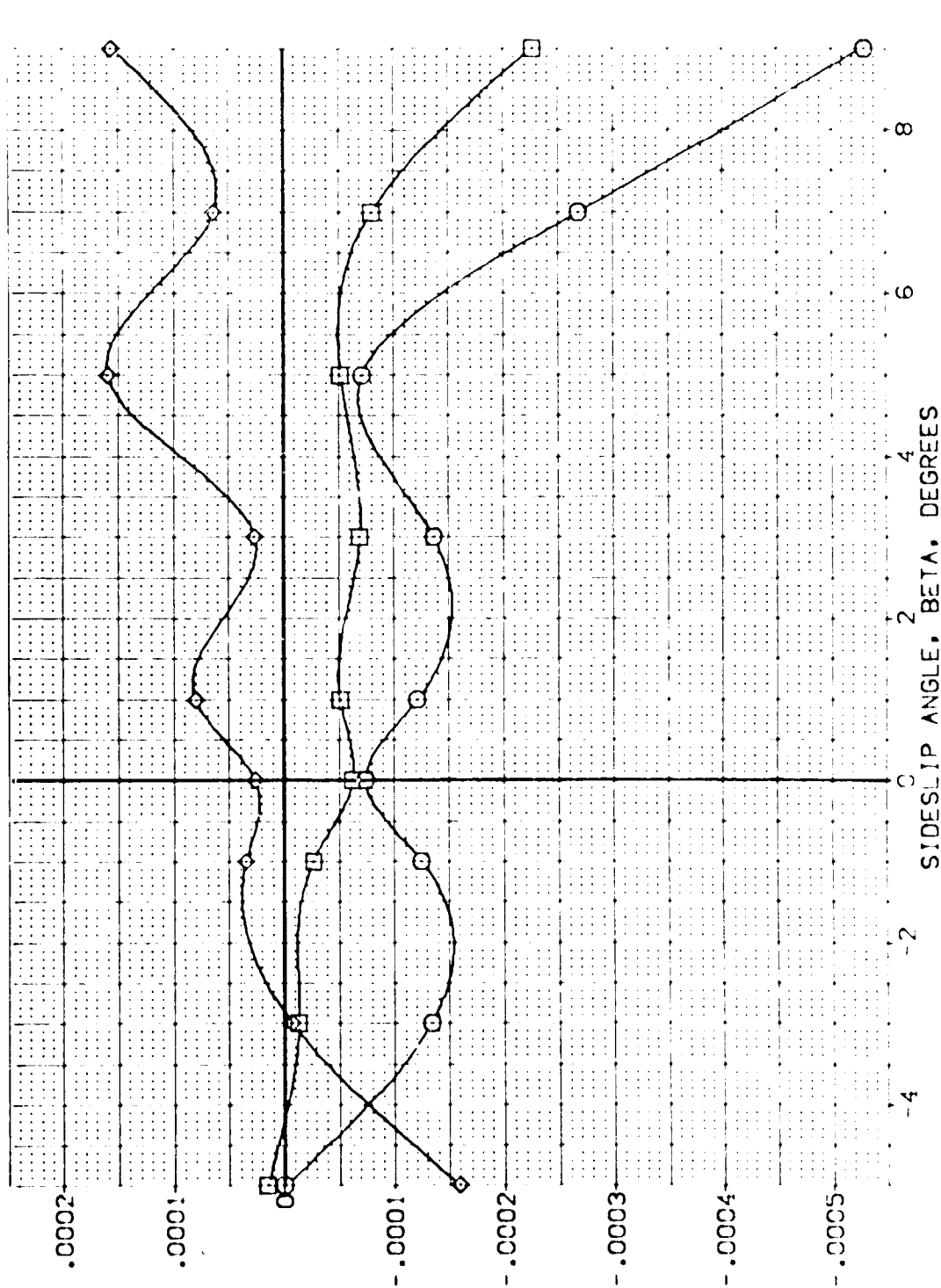


FIG. 28 SPEEDBRAKE DERIVATIVES, 55 DEGS. DEFLECT. (BASELINE = 25 DEGS.)

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	ELEVON	REFERENCE INFORMATION
(VEJ025)	ARC 11-747 DAS3A B C M F VI V	.000	.000	-11.700	.000	SREF 2.4210 SQ.FT.
(VEJ026)	ARC 11-747 DAS3A B C M F VI V	10.000	.000	-11.700	.000	LRREF 14.2440 IN.
(VEJ027)	ARC 11-747 DAS3A B C M F VI V	20.000	.000	-11.700	.000	BRREF 28.1004 IN.
						YMRP 32.3010 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

SIDE FORCE COEFF. DERIV. WITH SPEED BRAKE DEFL., DCY/DS, PER DEG

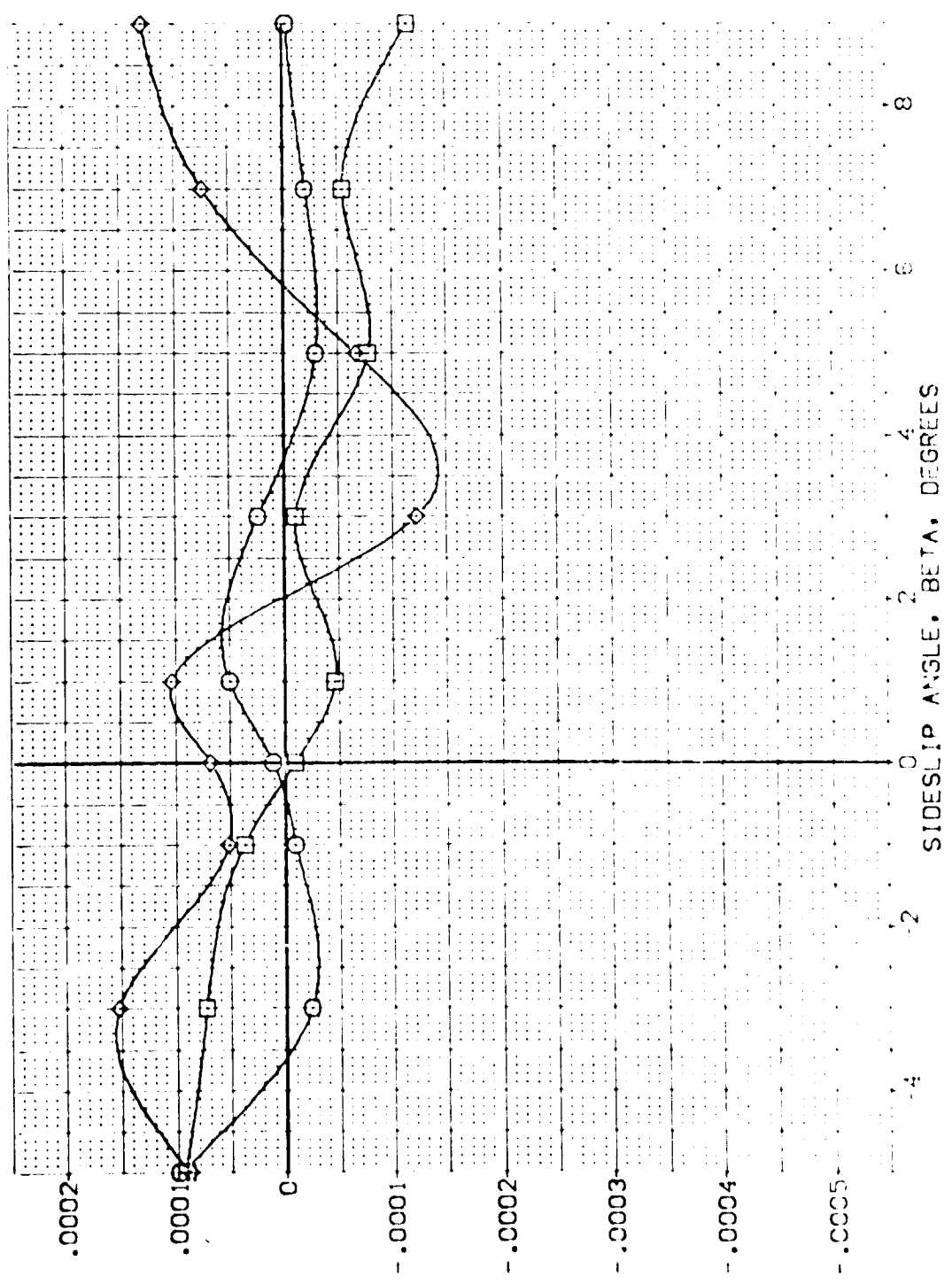


FIG. 28 SPEEDBRAKE DERIVATIVES, 55 DEGS. DEFLECT. (BASELINE = 25 DEGS.)

DATA SET SYMBOL CONFIGURATION DESCRIPTION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	ELEVON	REFERENCE INFORMATION
(VEJ025)	ARC 11-747 OAS3A B C M F VI V	.000	.000	-11.700	.000	SREF 2.4213 SO.FT.
(VEJ026)	ARC 11-747 OAS3A B C M F VI V	10.000	.000	-11.700	.000	LPREF 14.2443 IN.
(VEJ027)	ARC 11-747 OAS3A B C M F VI V	20.000	.000	-11.700	.000	BRREF 28.1004 IN.
						YMRP 32.3013 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

SIDE FORCE COEFF. DERIV. WITH SPEED BRAKE DEFL., DCY/DS, PER DEG

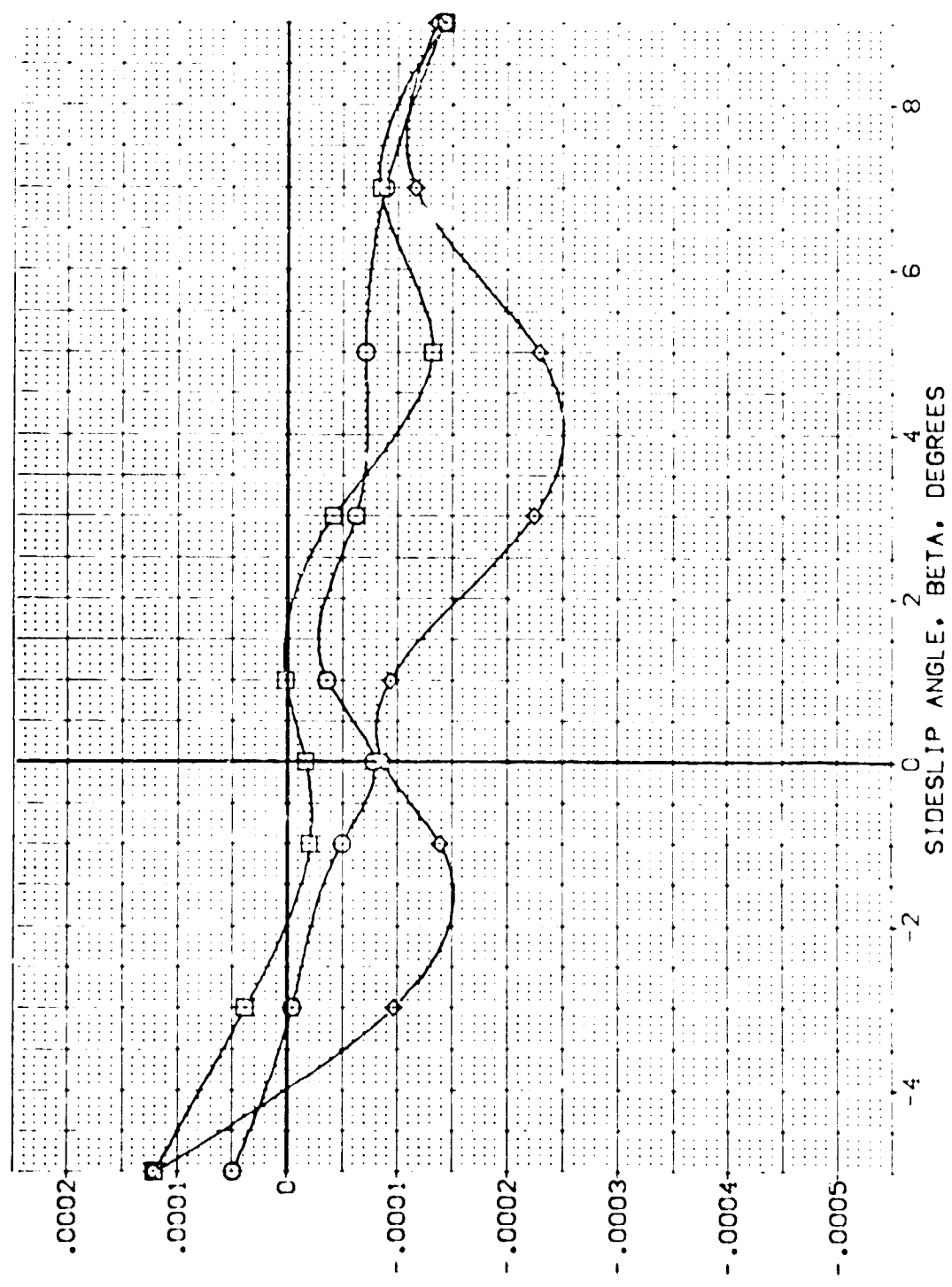


FIG. 28 SPEEDBRAKE DERIVATIVES, 55 DEGS. DEFLECT.(BASELINE = 25 DEGS.)

CEMACH = 1.20

YAWING MOMENT COEFF. DERIV. WITH SPEED BRAKE DEFL., DCYNDS. PER DEG

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	ELEVON	REFERENCE INFORMATION
(VEJ025)	ARC 11-747 DA53A B C M F VI V	.000	.000	-11.700	.000	SREF 2.4210 SQ.FT.
(VEJ026)	ARC 11-747 DA53A B C M F VI V	10.300	.000	-11.700	.000	LREF 14.2440 IN.
(VEJ027)	ARC 11-747 DA53A B C M F VI V	20.000	.000	-11.700	.000	BREF 28.1004 IN.
						XMFP 32.3010 IN.
						YMFP .0000 IN.
						ZMFP 11.2500 IN.
						SCALE .0300

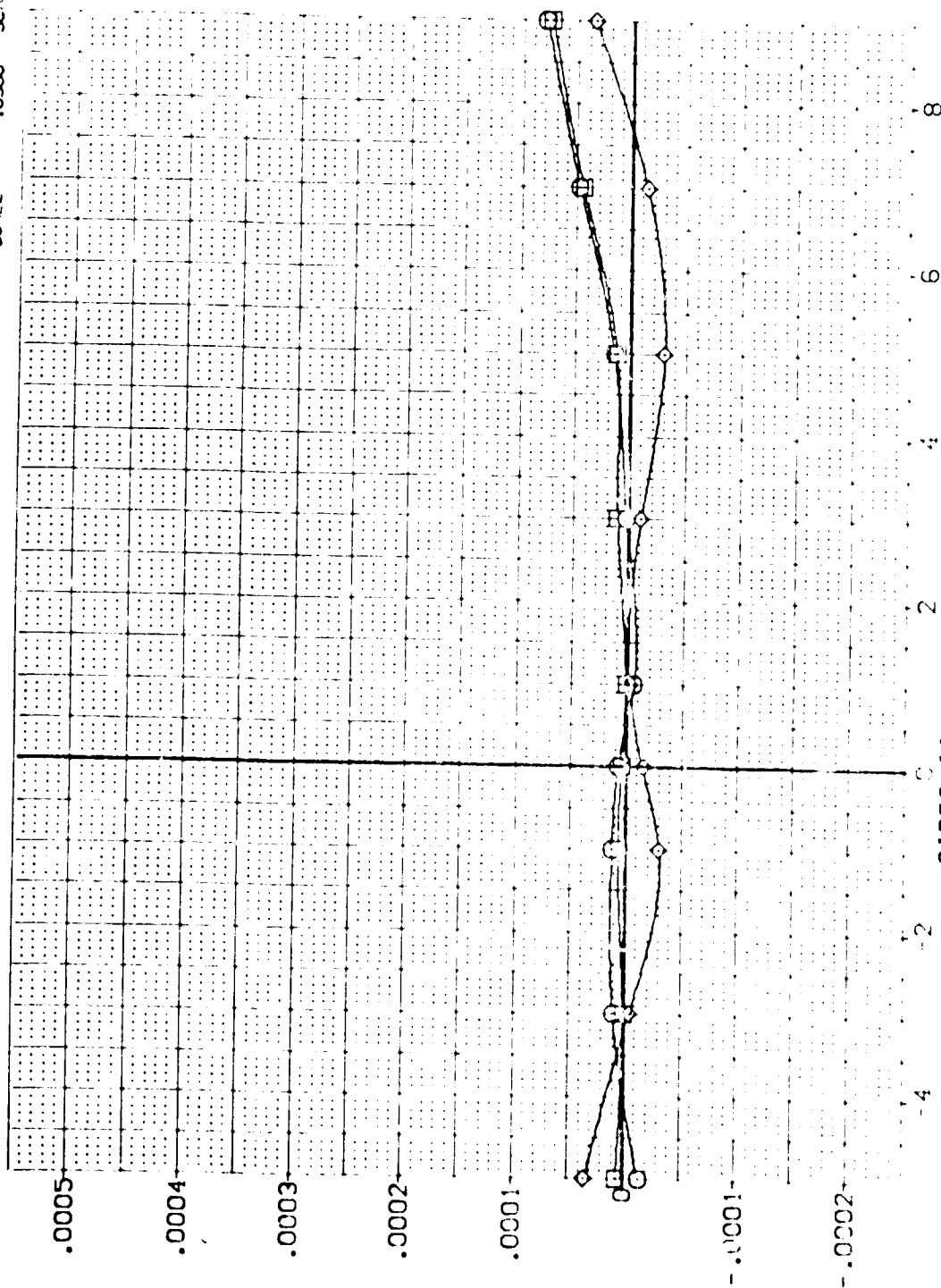


FIG. 28 SPEEDBRAKE DERIVATIVES, 55 DEGS. DEFLECT. (BASELINE = 25 DEGS.)

CADMAC- .60

DATA SET SYMBOL: (VEJ025) (VEJ026) (VEJ027)

CONFIGURATION DESCRIPTION: ARC 11-747 QAS3A B C H F VI V  
ARC 11-747 QAS3A B C H F VI V  
ARC 11-747 QAS3A B C H F VI V

NON: RVUL  
NON: RVUL  
NON: RVUL

ALPHA: .000  
10.000  
20.000

RUDER: .000  
.000  
.000

BDFLAP: -11.700  
-11.700  
-11.700

ELEVON: .000  
.000  
.000

REFERENCE INFORMATION: SREF 2.4210 SQ.FT.  
LREF 14.2440 IN.  
BREF 28.1004 IN.  
XMRP 32.3013 IN.  
YMRP 11.0000 IN.  
ZMRP 11.2500 IN.  
SCALE .0300

YAWING MOMENT COEFF. DERIV. WITH SPEED BRAKE DEFL., DCYNDS. PER DEG

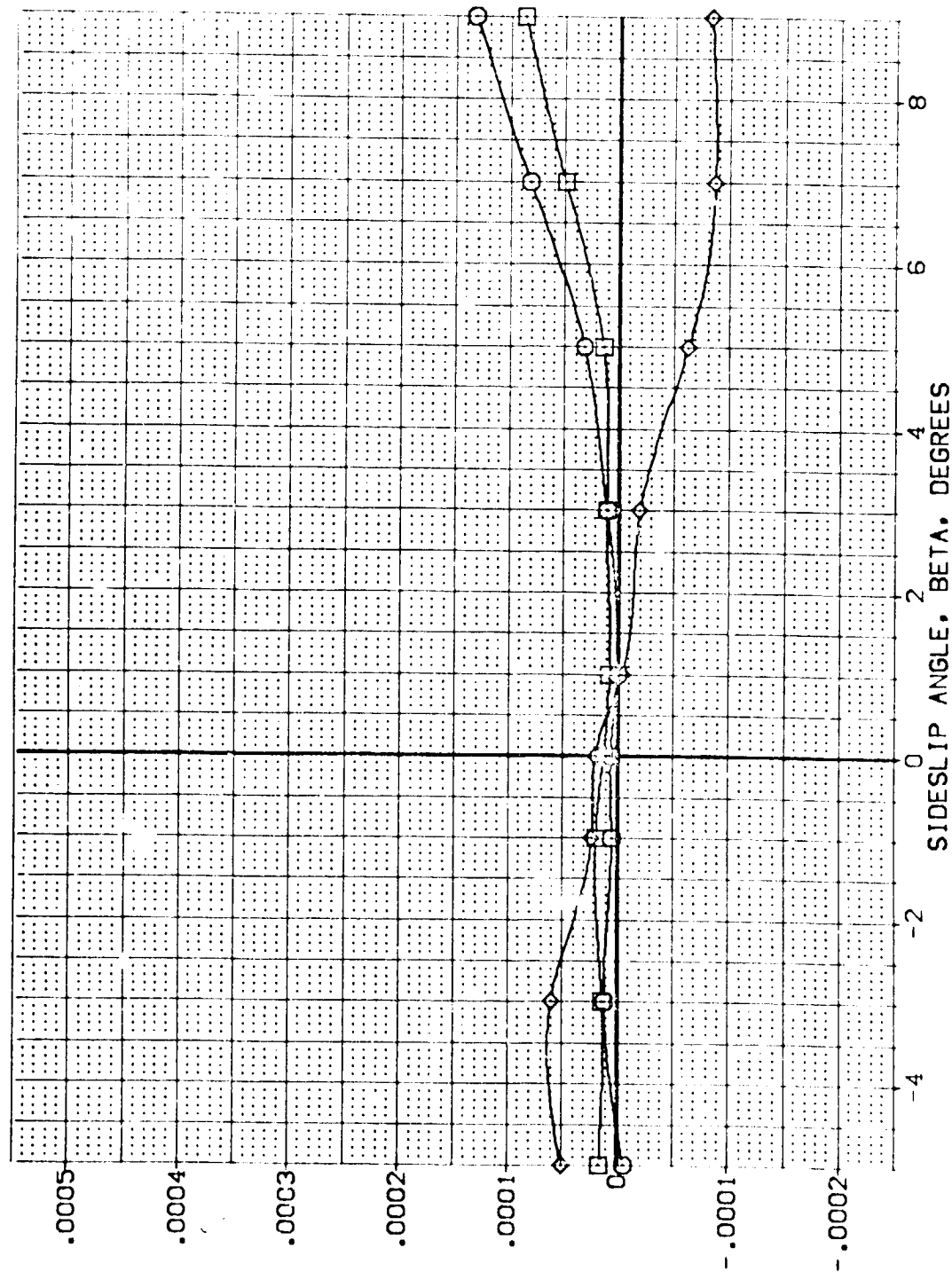


FIG. 28 SPEEDBRAKE DERIVATIVES, 55 DEGS. DEFLECT.(BASELINE = 25 DEGS.)

(B)MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	ELEVON	REFERENCE INFORMATION
(VE1025)	ARC 11-747 QAS3A B C M F V1	.000	.000	-11.700	.000	SREF 2.4210 SQ.FT.
(VE1026)	ARC 11-747 QAS3A B C M F V1	10.000	.000	-11.700	.000	LREF 14.2440 IN.
(VE1027)	ARC 11-747 QAS3A B C M F V1	20.000	.000	-11.700	.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP 11.2500 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

YAWING MOMENT COEFF. DERIV. WITH SPEED BRAKE DEFL., DCYND. PER DEG

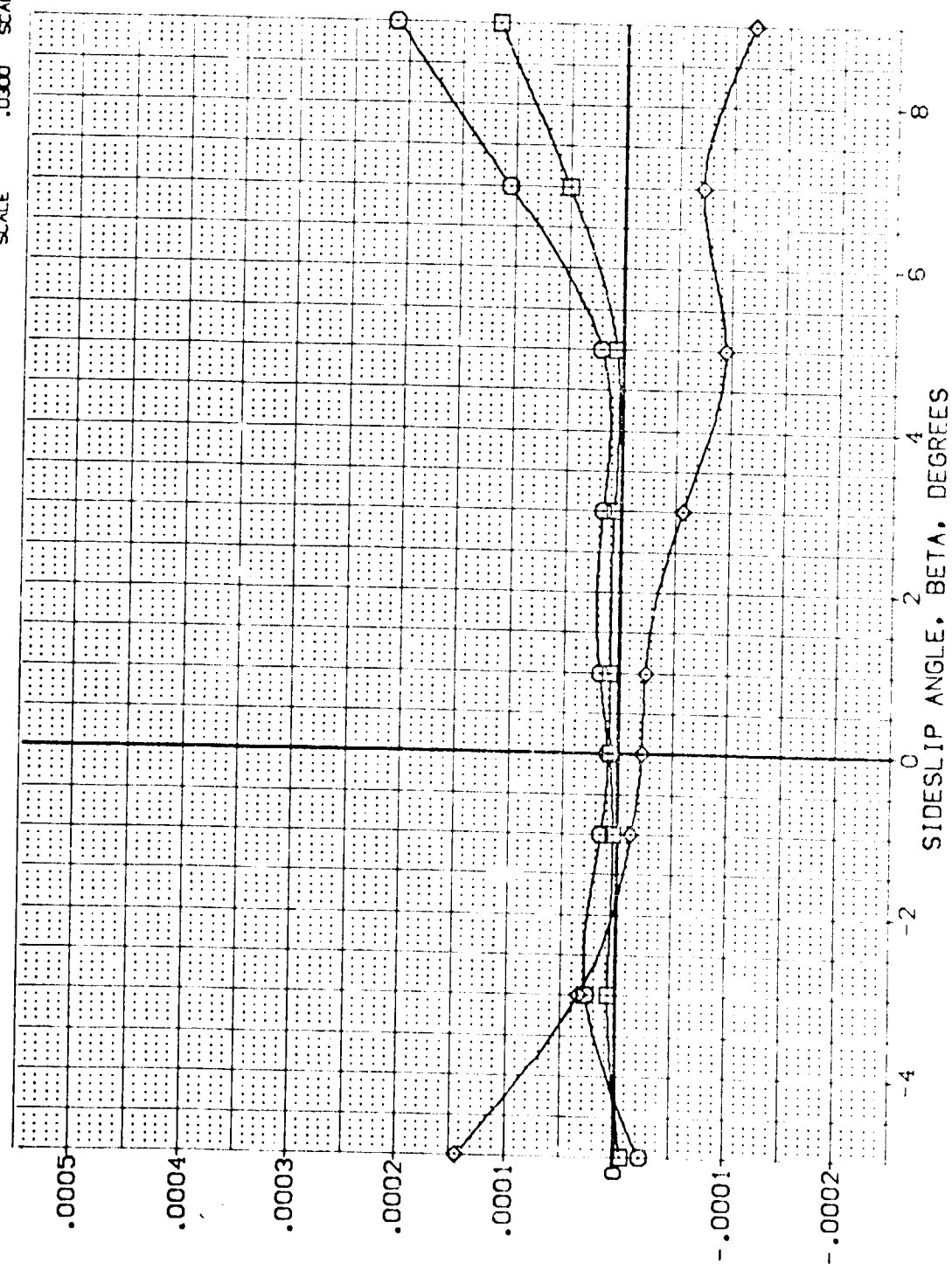


FIG. 28 SPEEDBRAKE DERIVATIVES, 55 DEGS. DEFLECT.(BASELINE = 25 DEGS.)

(C)MACH = .90

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(VEJ025) ARC 11-747 DAS3A B C M F V1 V NOM. RV/L

(VEJ026) ARC 11-747 DAS3A B C M F V1 V NOM. RV/L

(VEJ027) ARC 11-747 DAS3A B C M F V1 V NOM. RV/L

ALPHA RUDDER BOFLAP ELEVON

.000 .000 .000 .000

10.000 -11.700 -11.700 .000

20.000 .000 -11.700 .000

REFERENCE INFORMATION

SREF 2.4210 SQ. FT.

LREF 14.2440 IN.

BREF 28.1004 IN.

XMRP 32.3010 IN.

YMRP .0000 IN.

ZMRP 11.2500 IN.

SCALE .0300

YAWING MOMENT COEFF. DERIV. WITH SPEED BRAKE DEFL., DCYNOS. PER DEG

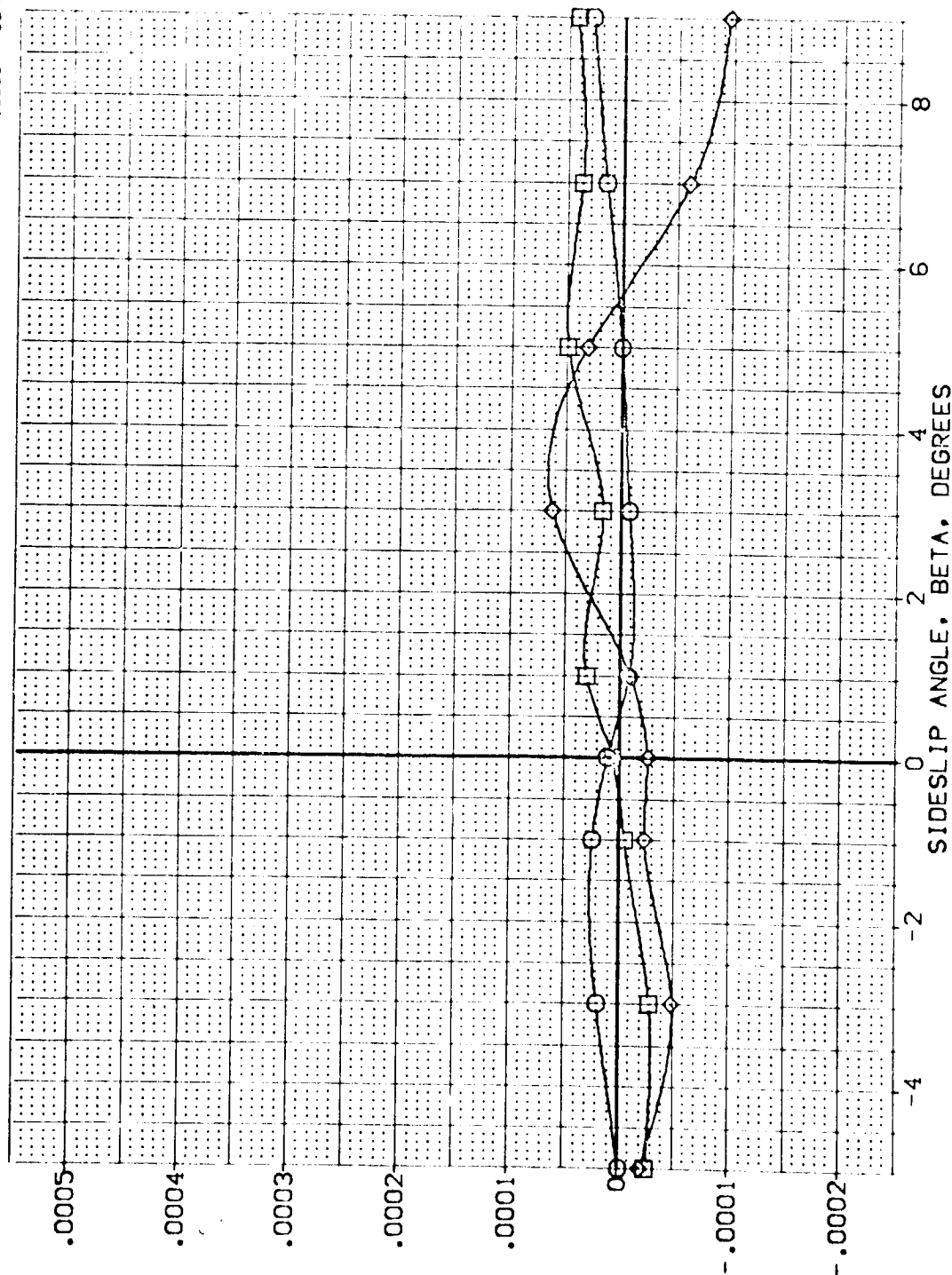


FIG. 28 SPEEDBRAKE DERIVATIVES, 55 DEGS. DEFLECT.(BASELINE = 25 DEGS.)

(D)MACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	ELEVON	REFERENCE INFORMATION
(VEJ025)	ARC 11-747 D453A B C M F V1 V	.000	.000	-11.700	.000	SREF 2.4210 SQ.FT.
(VEJ026)	ARC 11-747 D453A B C M F V1 V	10.000	.000	-11.700	.000	LREF 14.2440 IN.
(VEJ027)	ARC 11-747 D453A B C M F V1 V	20.000	.000	-11.700	.000	BREF 28.1004 IN.
						XMRP 32.9010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

YAWING MOMENT COEFF. DERIV. WITH SPEED BRAKE DEFL., DCYNDS. PER DEG

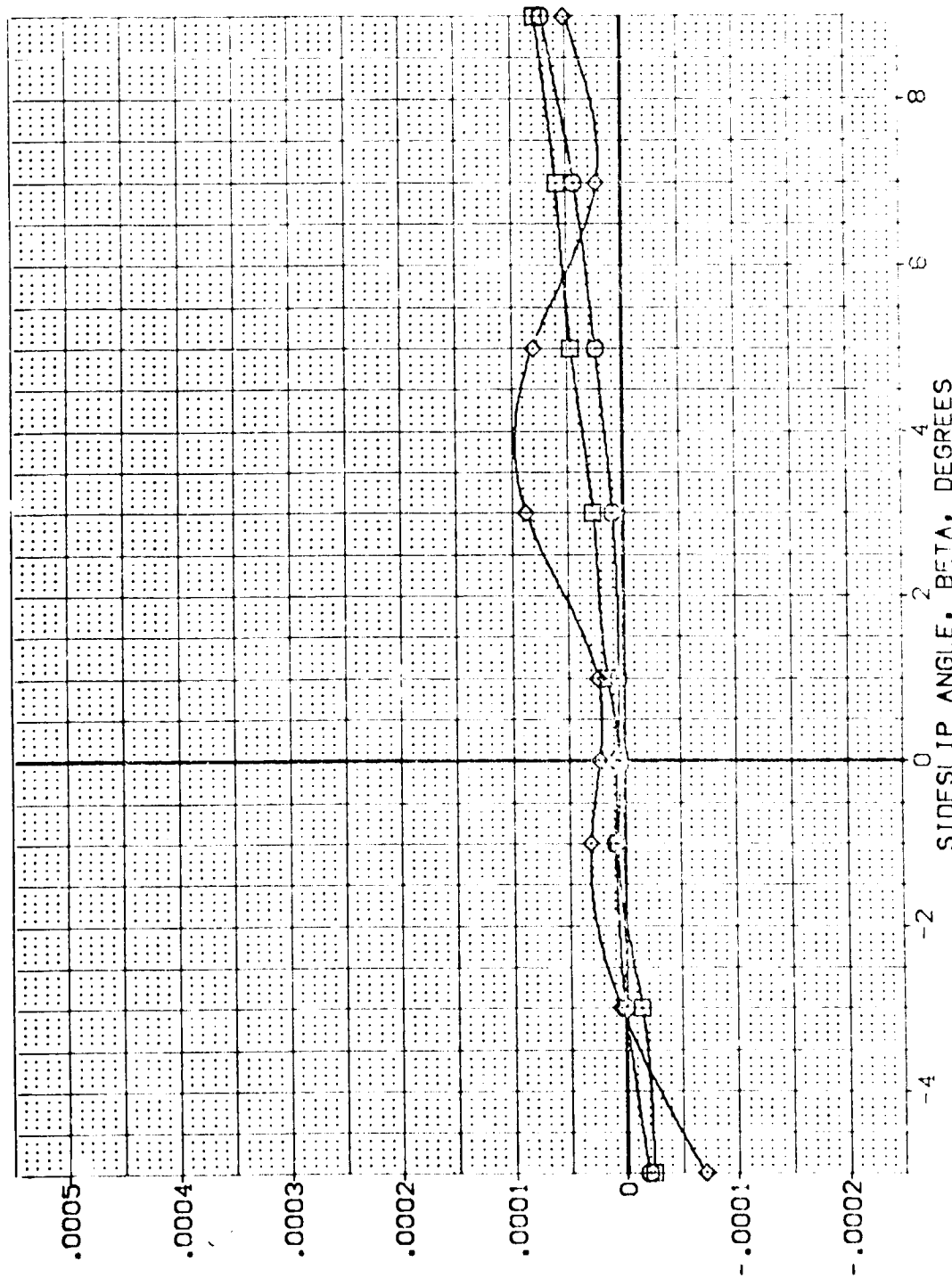


FIG. 28 SPEEDBRAKE DERIVATIVES, 55 DEGS. DEFLECT. (BASELINE = 25 DEGS.)

(E)MACH = 1.20



DATA SET SYMBOL    CONFIGURATION DESCRIPTION    ALPHA    RUDDER    BDLAP    ELEVON    REFERENCE INFORMATION

[VEJ025]	ARC 11-747 QAS3A B C M F VI V	.000	.000	-11.700	.000	SREF 2.4210 SQ.FT.
[VEJ026]	ARC 11-747 QAS3A B C M F VI V	10.000	.000	-11.700	.000	LREF 14.2440 IN.
[VEJ027]	ARC 11-747 QAS3A B C M F VI V	20.000	.000	-11.700	.000	BREF 28.1004 IN.
						XTRP 32.5010 IN.
						YTRP 11.0000 IN.
						ZTRP 11.2500 IN.
						SCALE .0300

ROLLING MOMENT COEFF. DERIV. WITH SPEED BRAKE DEFL., DCBLDS. PER DEG

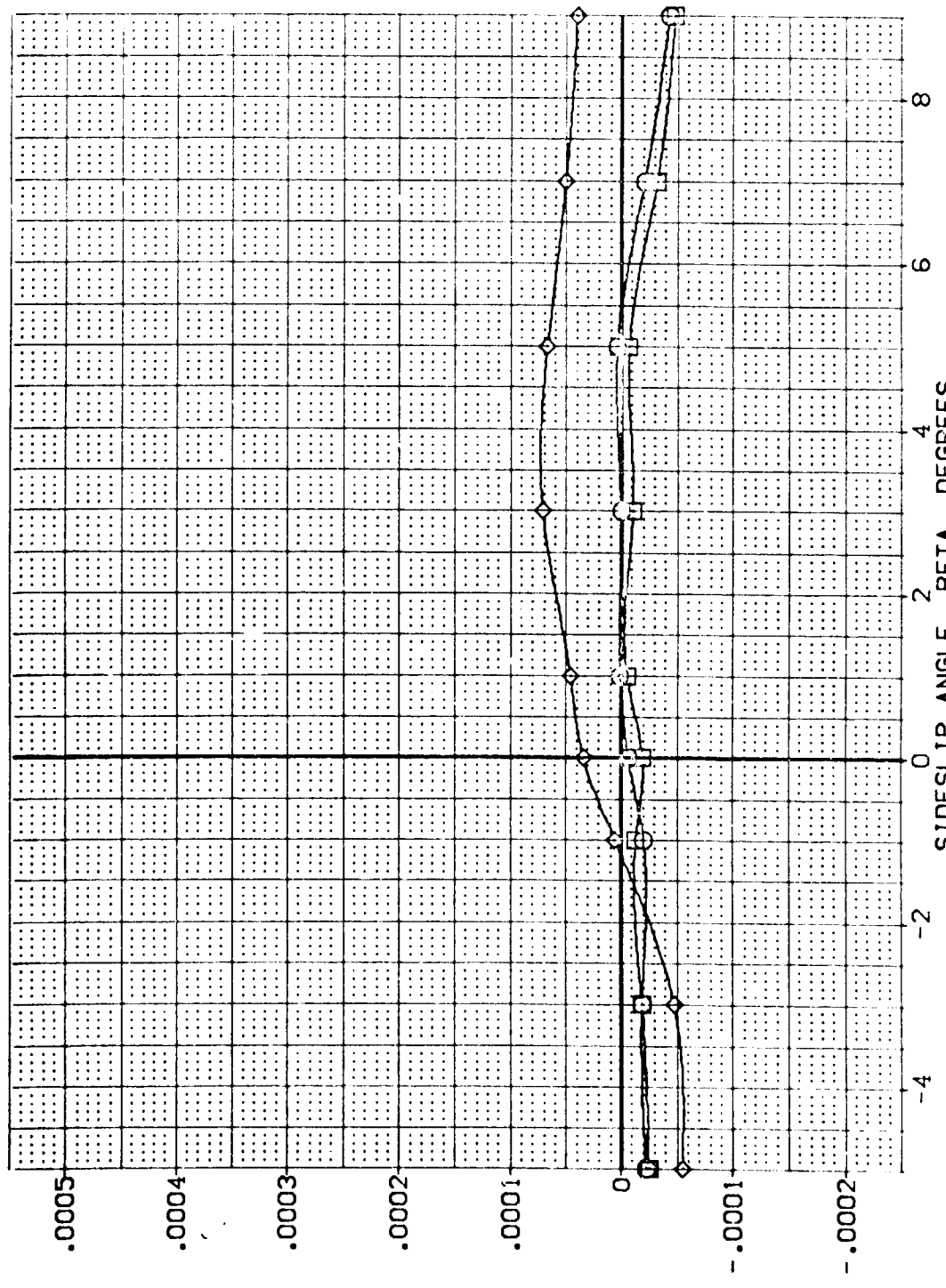


FIG. 28 SPEEDBRAKE DERIVATIVES, 55 DEGS. DEFLECT.(BASELINE = 25 DEGS.)

(A)MACH = .60

DATA SET SYMBOL CONFIGURATION DESCRIPTION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDER	BOFLAP	ELEVON	REFERENCE INFORMATION
(VE1025)	ARC 11-747 OAS3A B C M F VI V	.000	.000	-11.700	.000	SREF 2.4210 SQ.FT.
(VE1026)	ARC 11-747 OAS3A B C M F VI V	10.000	.000	-11.700	.000	LREF 14.2440 IN.
(VE1027)	ARC 11-747 OAS3A B C M F VI V	20.000	.000	-11.700	.000	BREF 20.1004 IN.
						XREF 32.5010 IN.
						YREF .0000 IN.
						ZREF 11.2500 IN.
						SCALE .0030

ROLLING MOMENT COEFF. DERIV. WITH SPEED BRAKE DEFL., DCBLDS, PER DEG

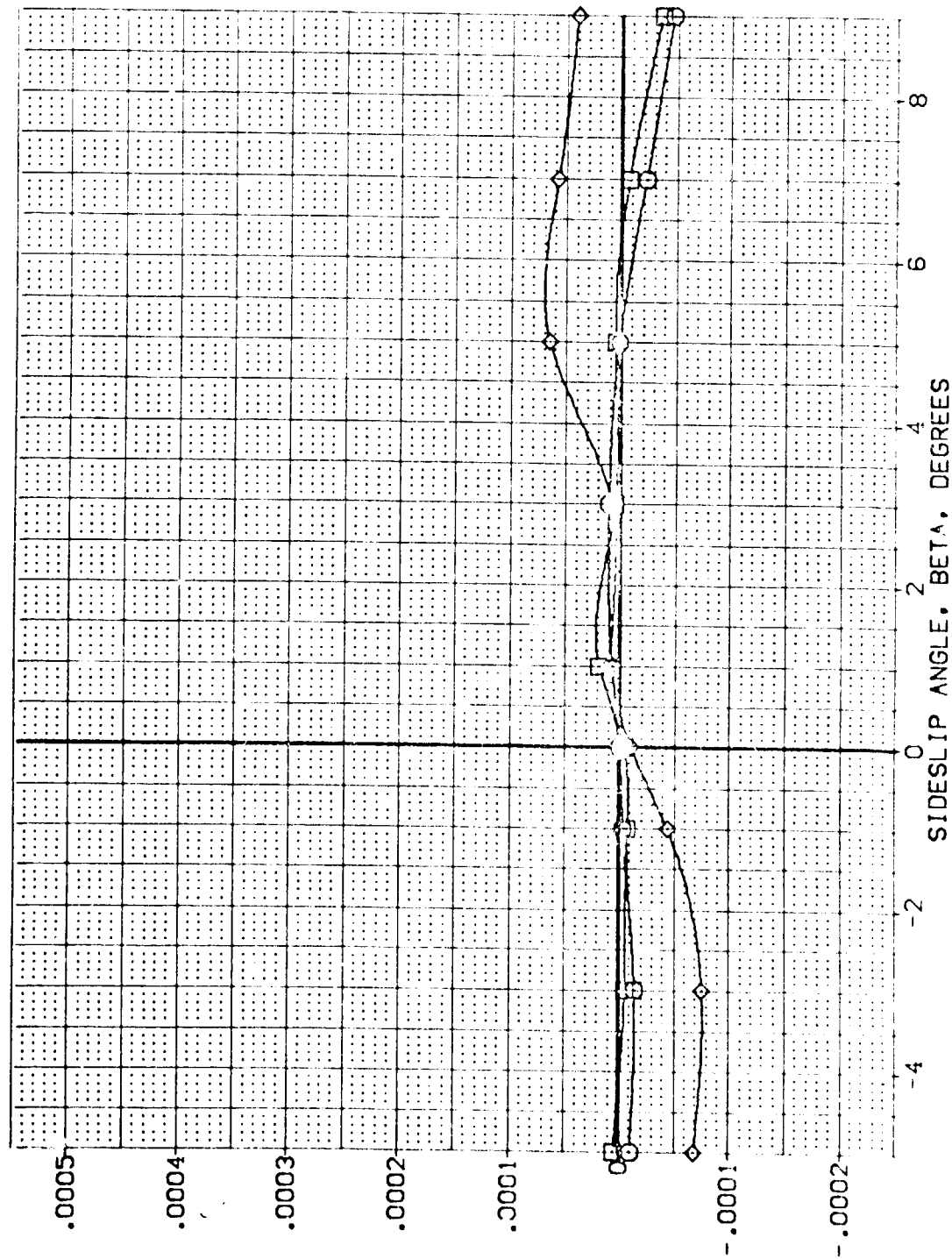


FIG. 28 SPEEDBRAKE DERIVATIVES, 55 DEGS. DEFLECT. (BASELINE = 25 DEGS.)

(B)MACH = .80

DATA SET SYMBOL CONFIGURATION DESCRIPTION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BD FLAP	ELEVON	REFERENCE INFORMATION
(VEJ025)	ARC 11-747 OAS3A B C M F VI V	.000	.000	-11.700	.000	SREF 2.4210 SQ.FT.
(VEJ026)	ARC 11-747 OAS3A B C M F VI V	10.000	.000	-11.700	.000	LREF 14.2440 IN.
(VEJ027)	ARC 11-747 OAS3A B C M F VI V	20.000	.000	-11.700	.000	BREF 28.1004 IN.
						XREF 32.3010 IN.
						YREF .0000 IN.
						ZREF 11.2500 IN.
						SCALE .0300

ROLLING MOMENT COEFF. DERIV. WITH SPEED BRAKE DEFL., DCBLDS, PER DEG

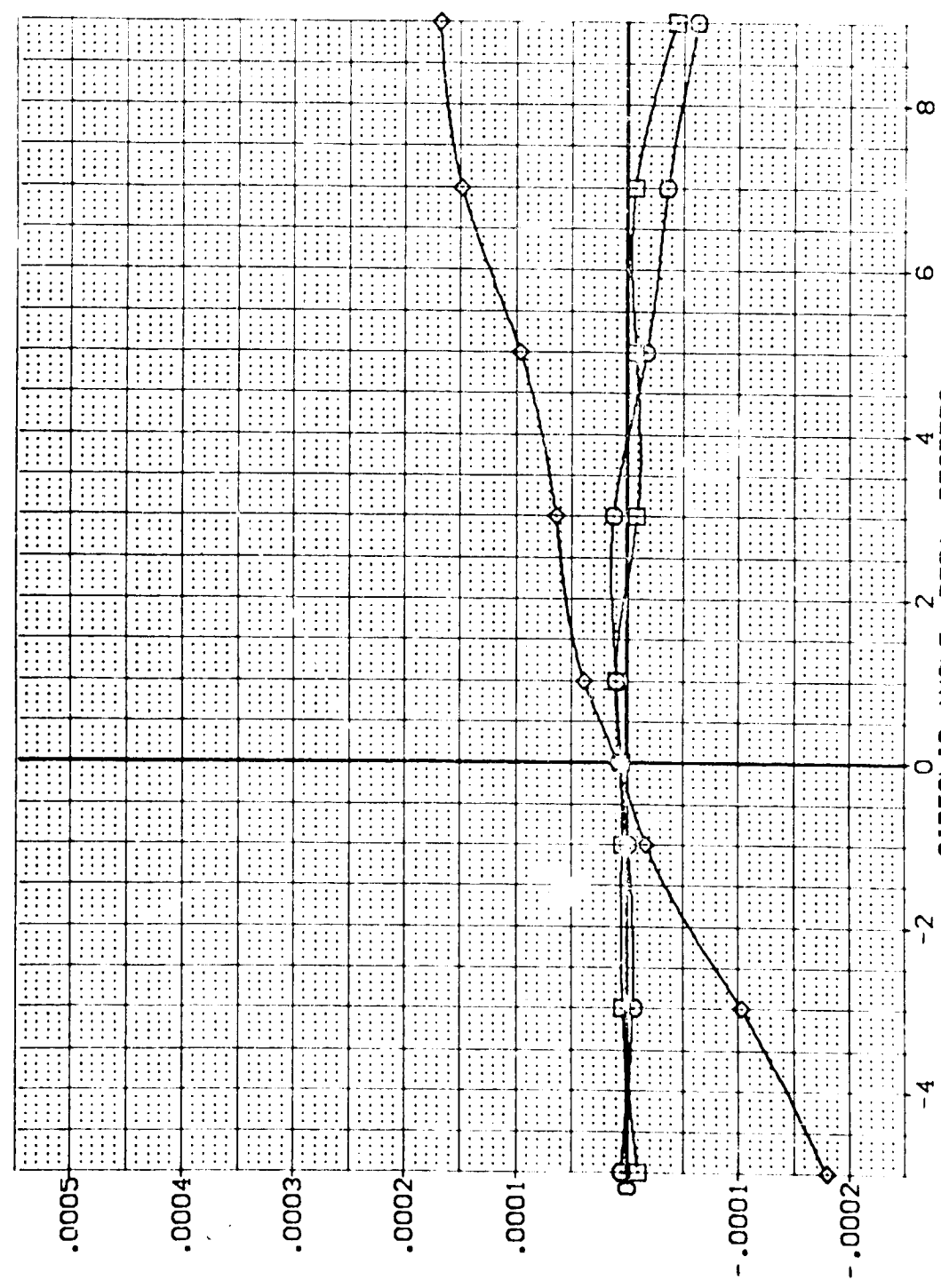


FIG. 28 SPEEDBRAKE DERIVATIVES, 55 DEGS. DEFLECT.(BASELINE = 25 DEGS.)

(C)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	ELEVON	REFERENCE INFORMATION
(VEJ025)	ARC 11-747 DAS3A B C M F VI V	.000	.000	-11.700	.000	SREF 2.4210 SQ.FT.
(VEJ026)	ARC 11-747 DAS3A B C M F VI V	10.000	.000	-11.700	.000	LREF 14.2440 IN.
(VEJ027)	ARC 11-747 DAS3A B C M F VI V	20.000	.000	-11.700	.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0000

ROLLING MOMENT COEFF. DERIV. WITH SPEED BRAKE DEFL., DCBLDS, PER DEG

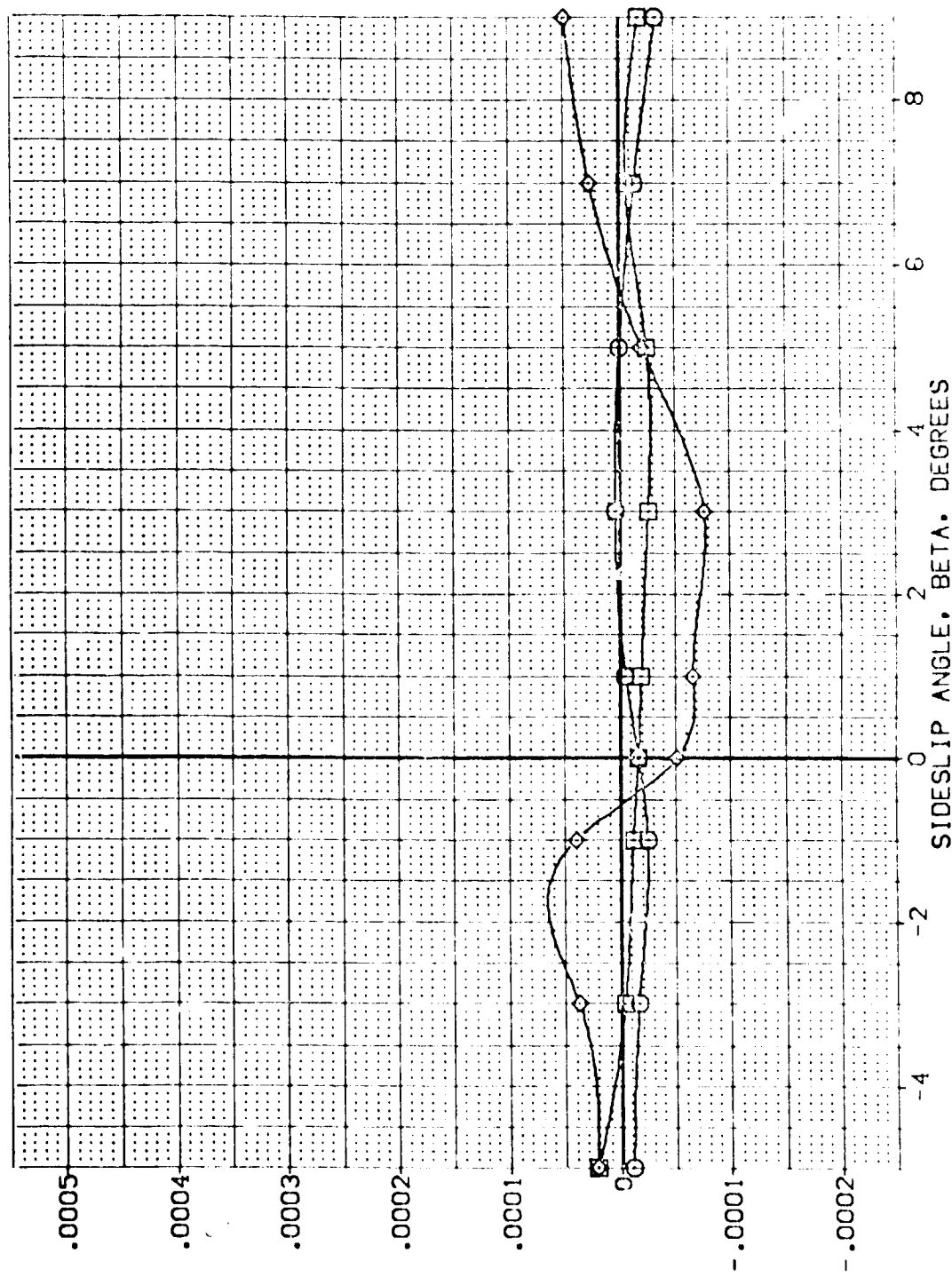


FIG. 28 SPEEDBRAKE DERIVATIVES, 55 DEGS. DEFLECT.(BASELINE = 25 DEGS.)

COMACH = 1.05

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA RUDDER BDF LAP ELEVON REFERENCE INFORMATION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BDF LAP	ELEVON	REFERENCE INFORMATION
(VEJ025)	ARC 11-747 GAS3A B C M F VI V	.000	.000	-11.700	.000	SREF 2.4210 SQ.FT.
(VEJ026)	ARC 11-747 GAS3A B C M F VI V	10.000	.000	-11.700	.000	LREF 14.2440 IN.
(VEJ027)	ARC 11-747 GAS3A B C M F VI V	20.000	.000	-11.700	.000	BREF 28.1004 IN.
						XREF 32.3010 IN.
						YREF 11.0000 IN.
						ZREF 11.2500 IN.
						SCALE .0300

ROLLING MOMENT COEFF. DERIV. WITH SPEED BRAKE DEF., DCBLDS, PER DEG

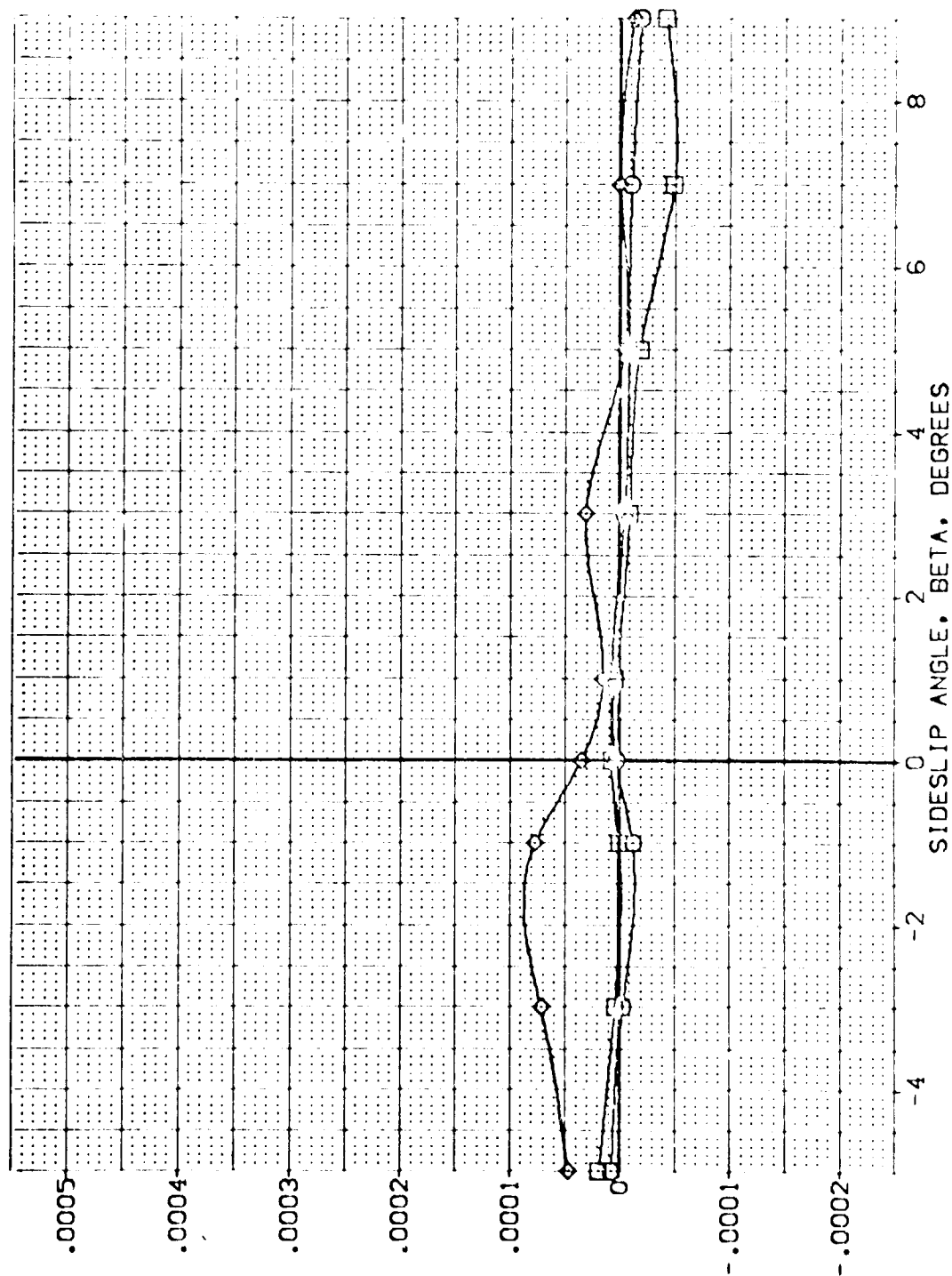


FIG. 28 SPEEDBRAKE DERIVATIVES, 55 DEGS. DEFLECT.(BASELINE = 25 DEGS.)

(E)MACH = 1.20

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DATA SET SYMBOL: [VEJ025] [VEJ026] [VEJ027]      CONFIGURATION DESCRIPTION: ARC 11-747 D453A B C M F V I V      NOM: RVL      REFERENCE INFORMATION: 2.4210 SQ.FT. IN: 14.2410 IN: 26.1004 IN: 32.3010 IN: 00.00 IN: 11.2500 IN: 0.0300 SCALE

ALPHA: 0.000 10.000 20.000      RUDDER: 0.000 0.000 0.000      BOFLAP: -11.700 -11.700 -11.700      ELEVON: 0.000 0.000 0.000

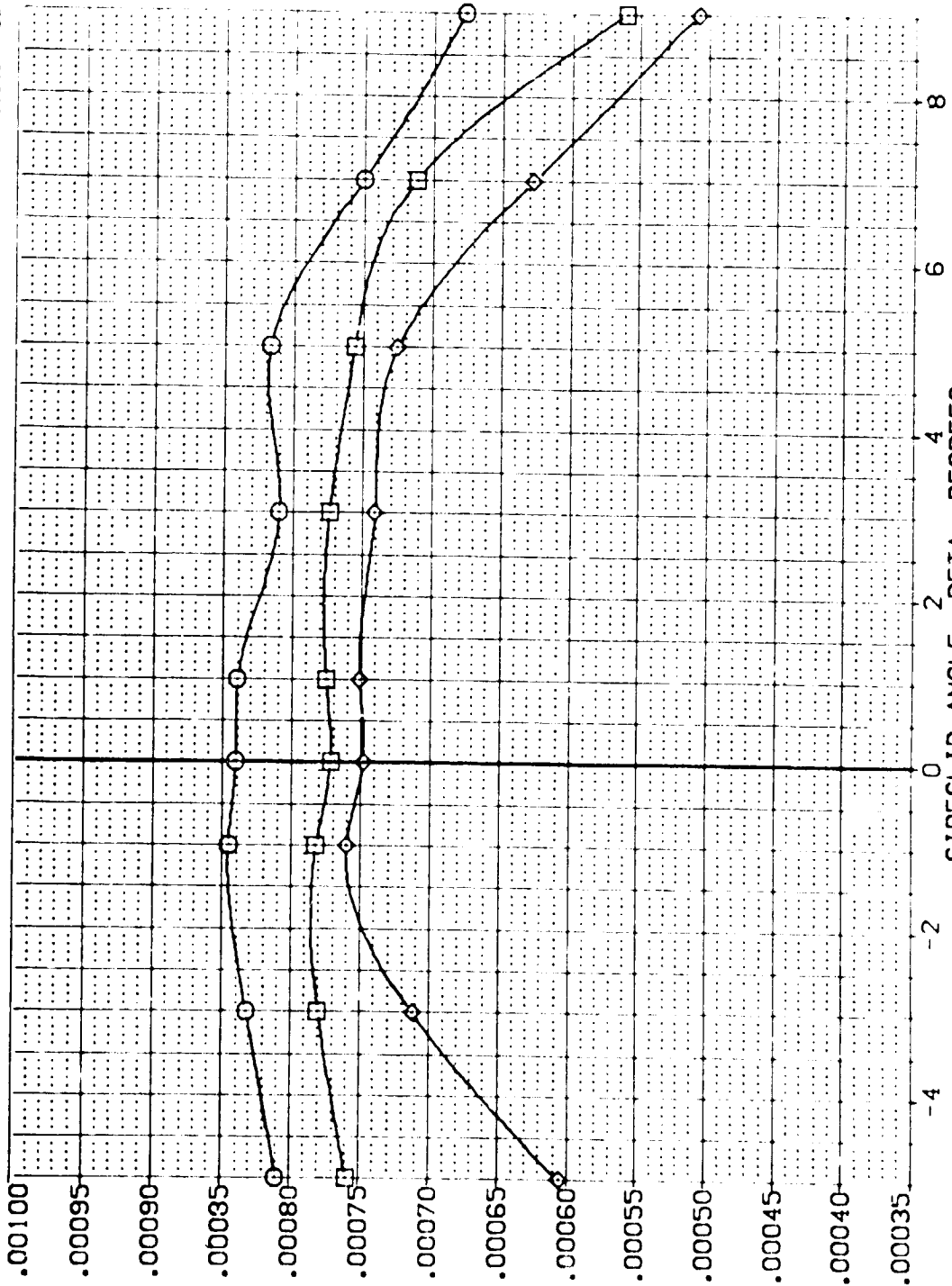


FIG. 28 SPEEDBRAKE DERIVATIVES, 55 DEGS. DEFLECT.(BASELINE = 25 DEGS.)

(B)MACH = .80



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BDLAP	ELEVON	REFERENCE INFORMATION
(VE#025)	ARC 11-747 QAS3A B C H F VI V	.000	.000	-11.700	.000	SREF 2.4210 SQ.FT.
(VE#026)	ARC 11-747 QAS3A B C H F VI V	10.000	.000	-11.700	.000	LREF 14.2440 IN.
(VE#027)	ARC 11-747 QAS3A B C H F VI V	20.000	.000	-11.700	.000	BREF 28.1004 IN.
						XTRP 32.3010 IN.
						YTRP .0000 IN.
						ZTRP 11.2500 IN.
						SCALE .0300

PITCHING MOMENT COEFF. DERIV. WITH SPEED BRAKE DEFL., DCLMDS. PER DEG

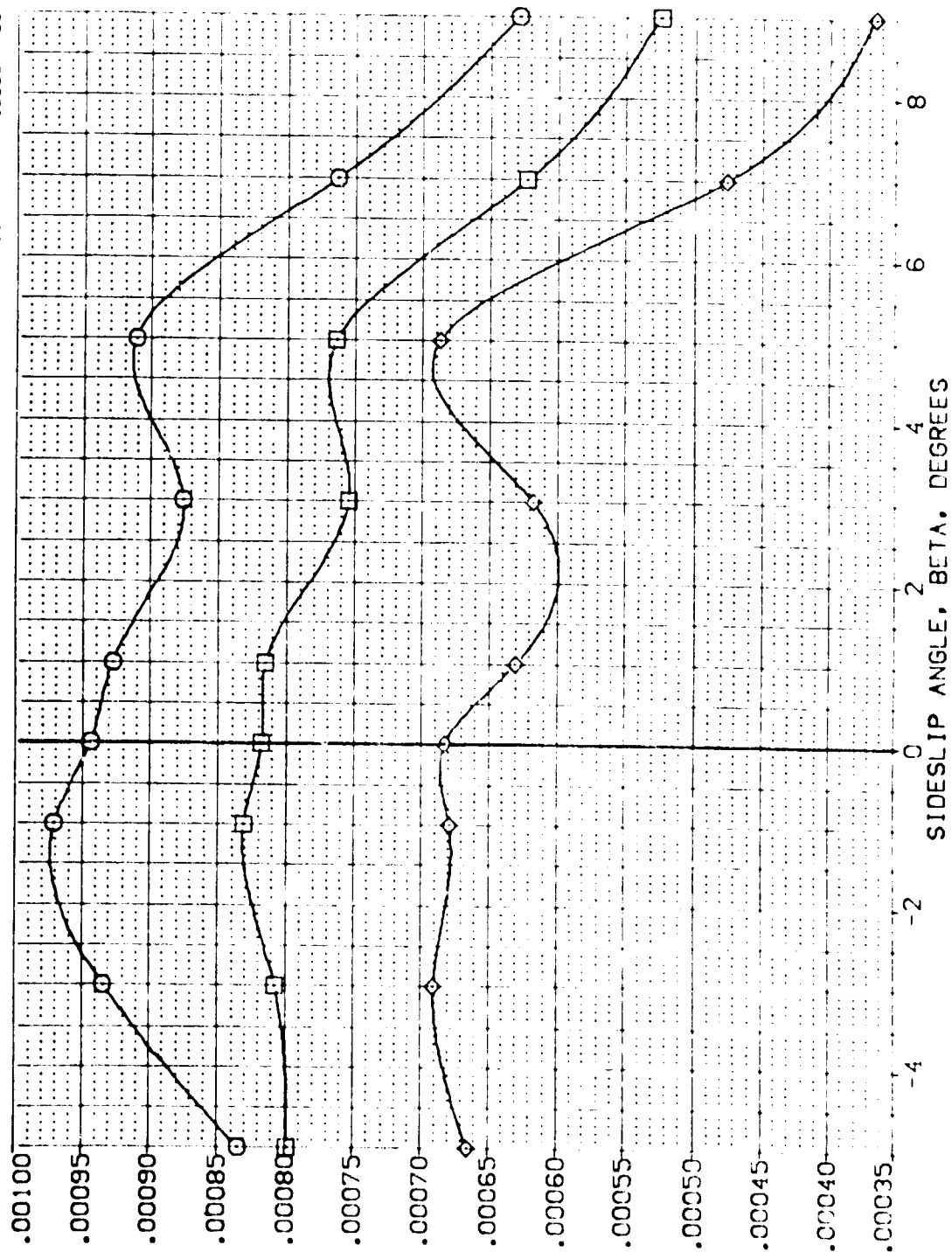



FIG. 28 SPEEDBRAKE DERIVATIVES, 55 DEGS. DEFLECT. (BASELINE = 25 DEGS.)

(C/MACH = .80



DATA SET SYMBOL:  CONFIGURATION DESCRIPTION: ARC 11-747 OAS3A B C M F V1 V NOM: RV/L  
 (VEJ025) ARC 11-747 OAS3A B C M F V1 V NOM: RV/L  
 (VEJ026) ARC 11-747 OAS3A B C M F V1 V NOM: RV/L  
 (VEJ027)

ALPHA	RUDDER	BD FLAP	ELEVON	REFERENCE INFORMATION
.000	.000	-11.700	.000	SREF 2.421C SQ.FT.
10.000	.000	-11.700	.000	LREF 14.244C IN.
20.000	.000	-11.700	.000	BREF 28.1004 IN.
				YMRP 32.301C IN.
				ZMRP .000C IN.
				SCALE 11.2500 IN.
				SCALE .0300

PITCHING MOMENT COEFF. DERIV. WITH SPEED BRAKE DEFL., DCLMDS. PER DEG

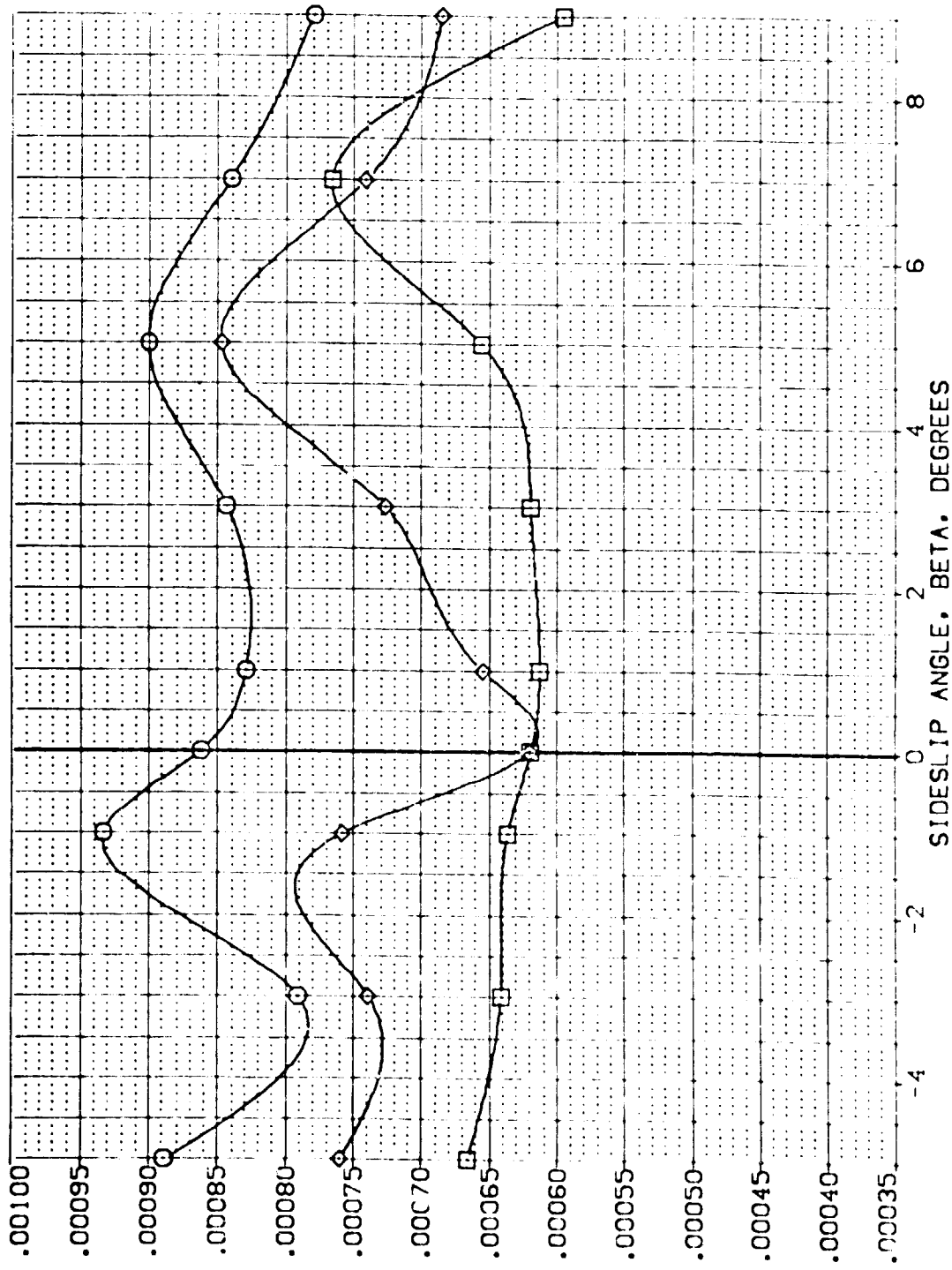


FIG. 28 SPEEDBRAKE DERIVATIVES, 55 DEGS. DEFLECT.(BASELINE = 25 DEGS.)

COMACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDER	BD FLAP	ELEVON	REFERENCE INFORMATION
[VEJ025]	ARC 11-747 DASSA B C H F V	.000	.000	-11.700	.000	SREF 2.4210 SQ. FT.
[VEJ026]	ARC 11-747 DASSA B C H F V	10.000	.000	-11.700	.000	LREF 14.2440 IN.
[VEJ027]	ARC 11-747 DASSA B C H F V	20.000	.000	-11.700	.000	BREF 28.1001 IN.
						XREF 32.3016 IN.
						YREF 5.500 IN.
						ZREF 11.2500 IN.
						SCALE .0300 SCALE

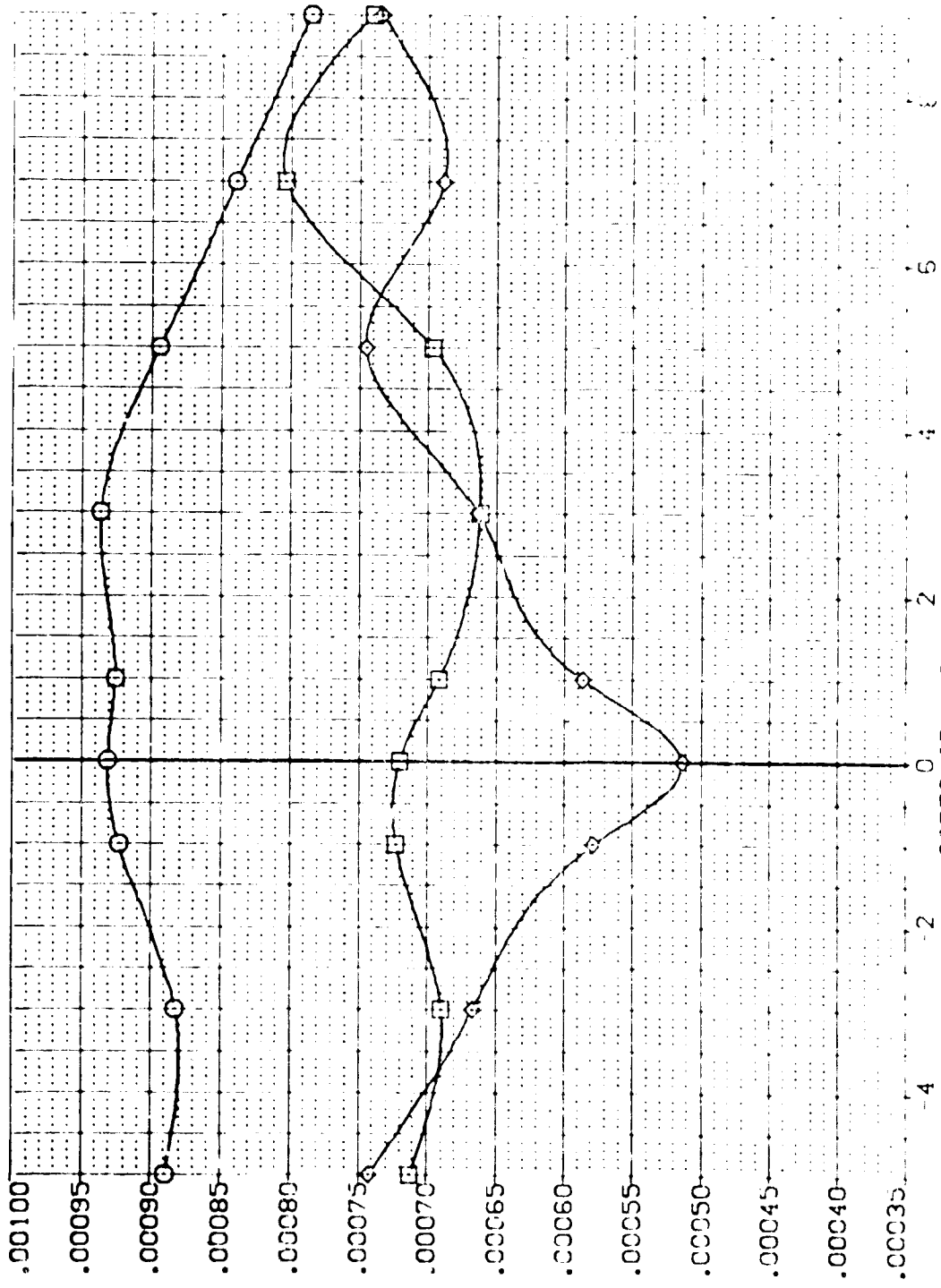


FIG. 28 SPEEDBRAKE DERIVATIVES, 55 DEGS. DEFLECT. (BASELINE = 25 DEGS.)

PITCHING MOMENT COEFF. DERIV. WITH SPEED BRAKE DEFL., DCLMS, PER DEG

DATA SET SYMBOL CONFIGURATION DESCRIPTION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	ELEVON	REFERENCE INFORMATION
(VE1039)	ARC 11-747 DA53A B C H F VI V	.000	.000	-11.700	.000	SREF 2.4210 SQ.FT.
(VE1040)	ARC 11-747 DA53A B C H F VI V	10.000	.000	-11.700	.000	LREF 14.2440 IN.
(VE1041)	ARC 11-747 DA53A B C H F VI V	20.000	.000	-11.700	.000	BREF 23.1004 IN.
						XREF 32.3010 IN.
						YREF .0000 IN.
						ZREF 11.2500 IN.
						SCALE .0000

SIDE FORCE COEFF. DERIV. WITH SPEED BRAKE DEFL., DCY/DS, PER DEG

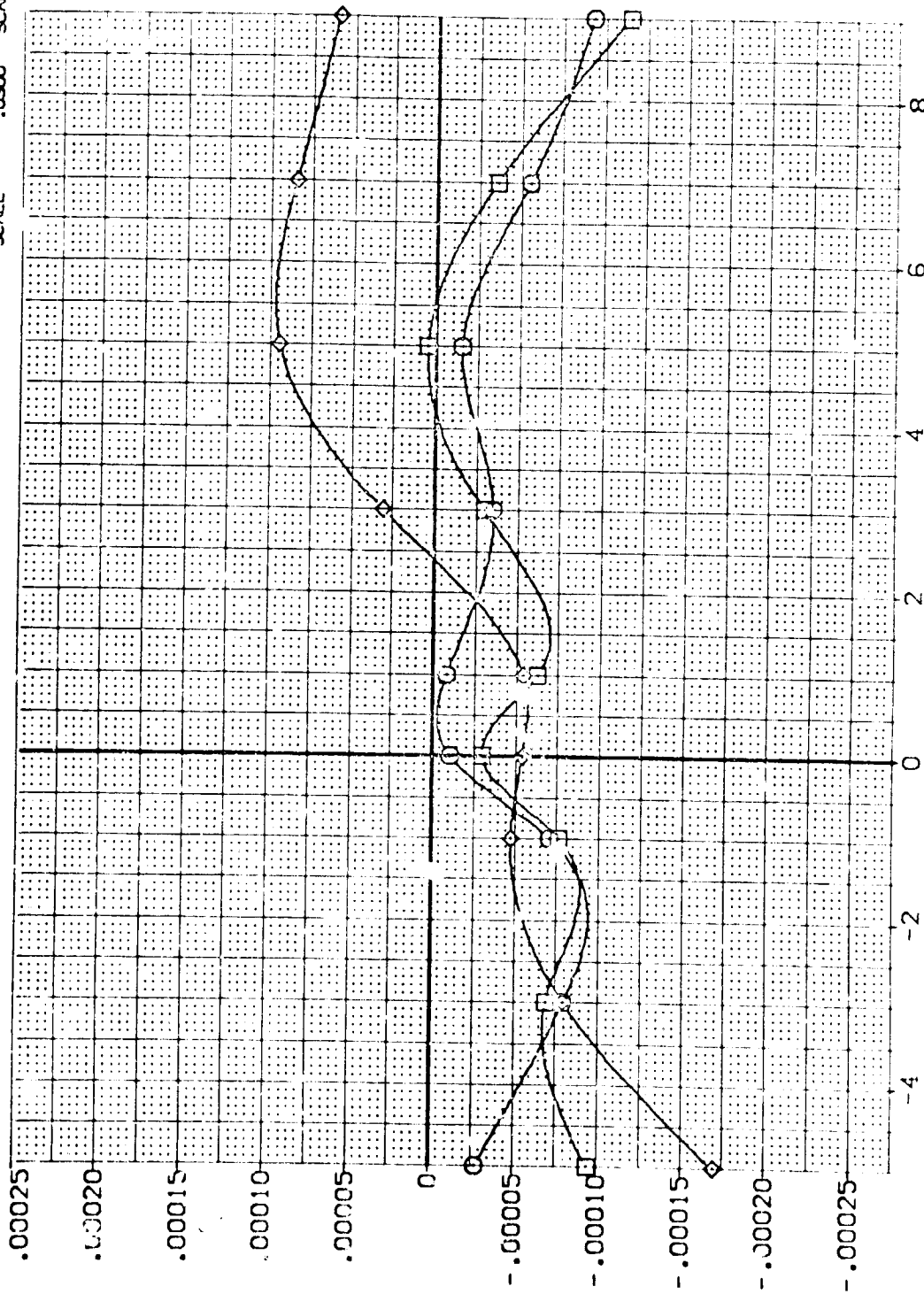


FIG. 29 SPEEDBRAKE DERIVATIVES, 85 DEGS. DEFLECT.(BASELINE = 25 DEGS.)

(A) MACH .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	ELEVON	REFERENCE INFORMATION
[VEJ028]	ARC 11-747 OAS3A B C M F VI V	.000	.000	-11.700	.000	SREF 2.4210 SQ.FT.
[VEJ040]	ARC 11-747 OAS3A B C M F VI V	10.000	.000	-11.700	.000	LREF 14.2440 IN.
[VEJ041]	ARC 11-747 OAS3A B C M F VI V	20.000	.000	-11.700	.000	BREF 28.1004 IN.
						XMRP .0000 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0000

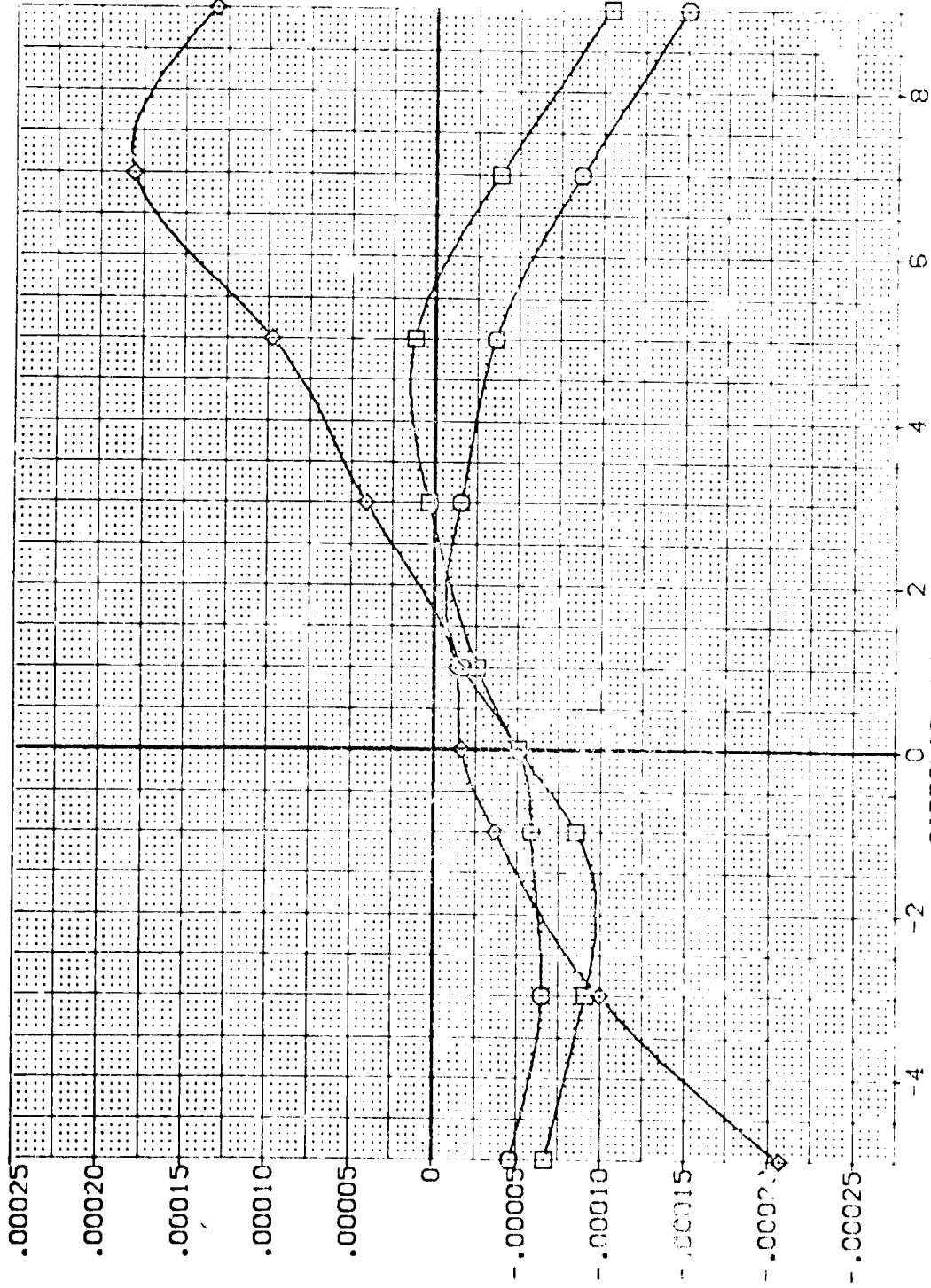


FIG. 29 SPEEDBRAKE DERIVATIVES, 85 DEGS. DEFLECT.(BASELINE = 2° DEGS.)

(B)MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	ELEVON	REFERENCE INFORMATION
(VEJ039)	ARC 11-747 OAS3A B C M F VI V	.000	.000	-11.700	.000	SREF 2.4210 SQ.FT.
(VEJ040)	ARC 11-747 OAS3A B C M F VI V	10.000	.000	-11.700	.000	LREF 14.2440 IN.
(VEJ041)	ARC 11-747 OAS3A B C M F VI V	20.000	.000	-11.700	.000	BREF 28.1004 IN.
						XMPP 32.3010 IN.
						YMPP .0000 IN.
						ZMPP 11.2500 IN.
						SCALE .0300

SIDE FORCE COEFF. DERIV. WITH SPEED BRAKE DEFL., DCY/DS. PER DEG

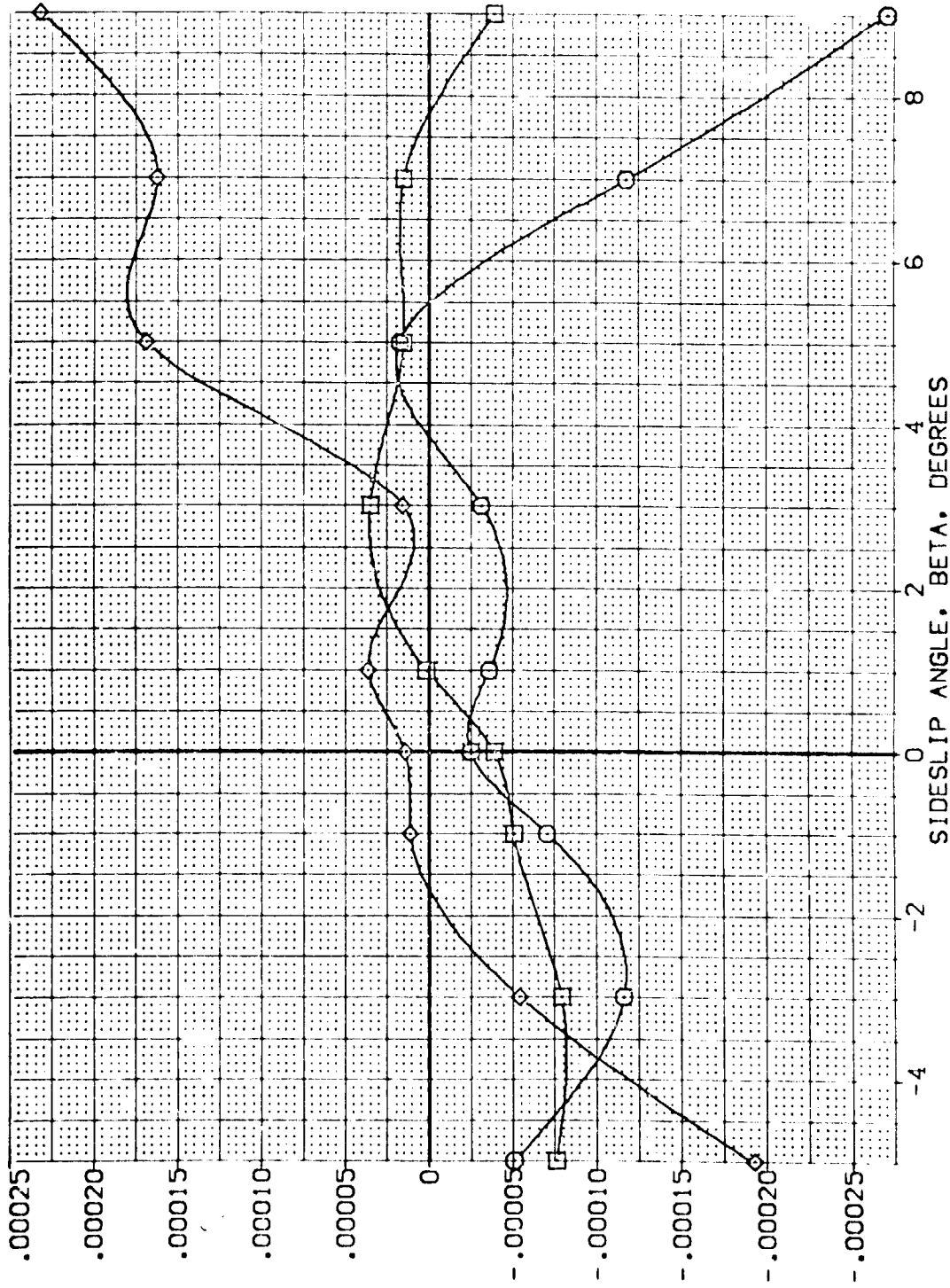


FIG. 29 SPEEDBRAKE DERIVATIVES, 85 DEGS. DEFLECT. (BASELINE = 25 DEGS.)

(C)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	ELEVON	REFERENCE INFORMATION
(VEJ038)	ARC 11-747 DAS3A B C M F VI V	.000	.000	-11.700	.000	SREF 2.4210 SQ.FT.
(VEJ040)	ARC 11-747 DAS3A B C M F VI V	10.000	.000	-11.700	.000	LREF 14.2440 IN.
(VEJ041)	ARC 11-747 DAS3A B C M F VI V	20.000	.000	-11.700	.000	BREF 28.1004 IN.
						XREF 32.3010 IN.
						YREF .0000 IN.
						ZREF 11.2500 IN.
						SCALE .0300

SIDE FORCE COEFF. DERIV. WITH SPEED BRAKE DEFL., DCY/DS, PER DEG

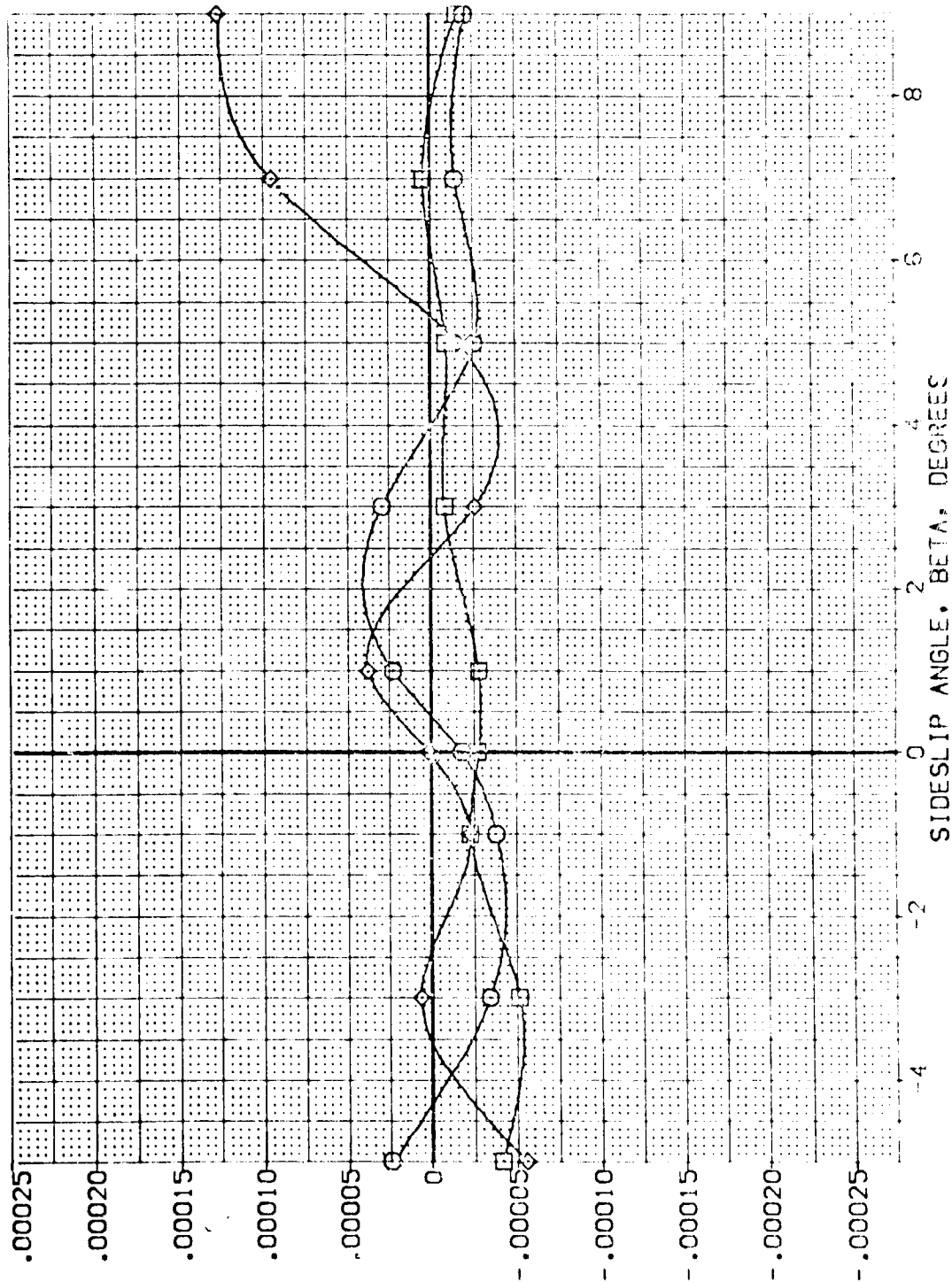


FIG. 29 SPEEDBRAKE DERIVATIVES, 85 DEGS. DEFLECT. (BASELINE = 25 DEGS.)

(D)MACH = 1.05

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA RUDDER Sideslip ELEVON REFERENCE INFORMATION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	Sideslip	ELEVON	REFERENCE INFORMATION
(VEJ038)	ARC 11-747 CA53A B C M F VI V	.000	.000	-11.700	.000	SREF 2.4210 SQ.FT.
(VEJ040)	ARC 11-747 CA53A B C M F VI V	10.000	.000	-11.700	.000	LREF 14.2440 IN.
(VEJ041)	ARC 11-747 CA53A B C M F VI V	20.000	.000	-11.700	.000	BREF 28.1004 IN.
						XREF 32.3010 IN.
						YREF 11.0000 IN.
						ZREF 11.2500 IN.
						SCALE .0000

SIDE FORCE COEFF. DERIV. WITH SPEED BRAKE DEFL., DCY/DS, PER DEG

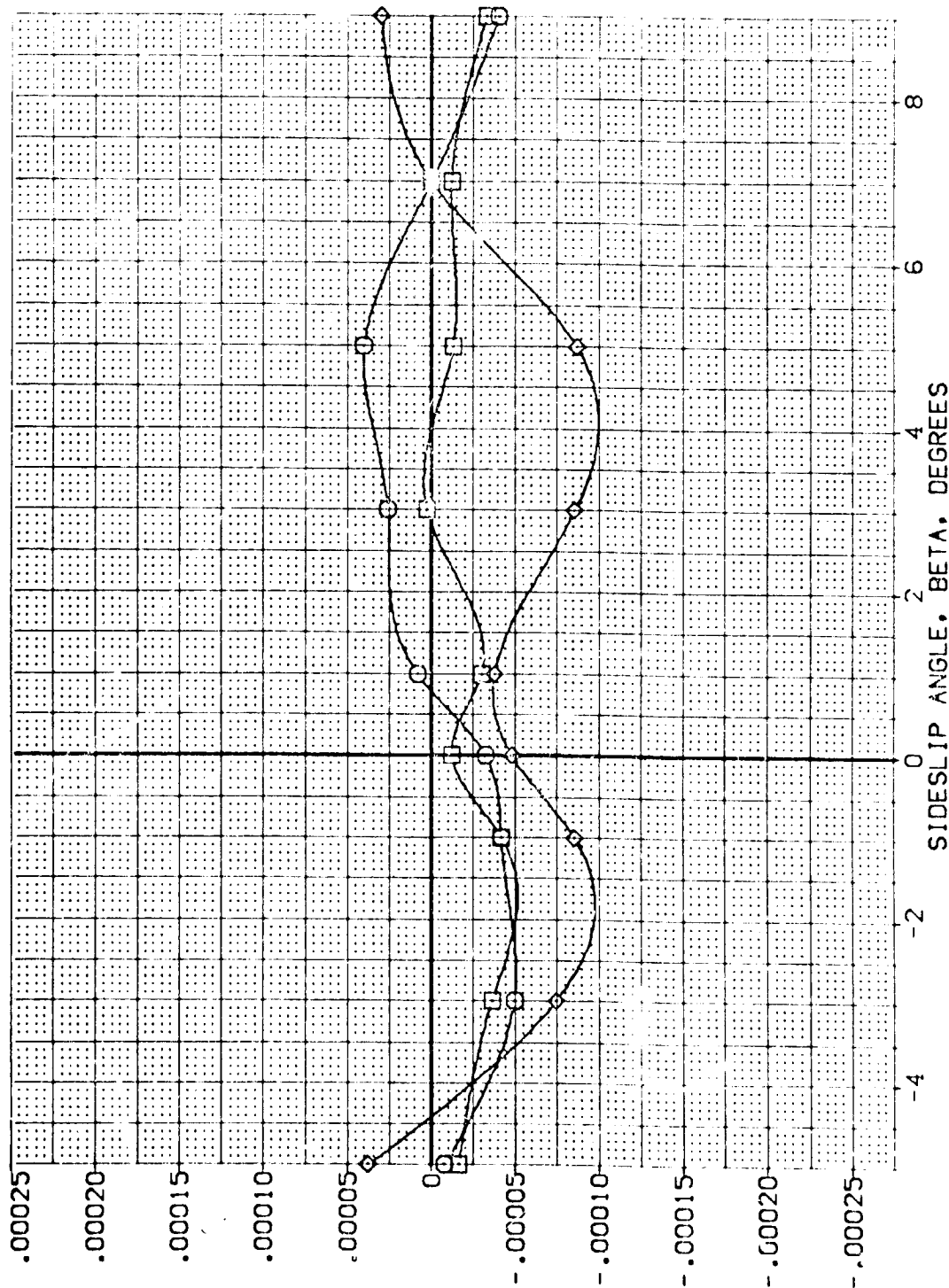


FIG. 29 SPEEDBRAKE DERIVATIVES, 85 DEGS. DEFLECT.(BASELINE = 25 DEGS.)

(E)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	ELEVON	REFERENCE INFORMATION
{VEJ028}	ARC 11-747 QAS3A B C M F V1	.000	.000	-11.700	.000	SREF 2.4210 SQ.FT.
{VEJ040}	ARC 11-747 QAS3A B C M F V1	10.000	.000	-11.700	.000	LREF 14.2440 IN.
{VEJ041}	ARC 11-747 QAS3A B C M F V1	20.000	.000	-11.700	.000	BREF 28.1004 IN.
						XMPP 32.3010 IN.
						YGRP .0000 IN.
						ZGRP 11.2500 IN.
						SCALE .0300

YAWING MOMENT COEFF. DERIV. WITH SPEED BRAKE DEFL., DCYNDS. PER DEG

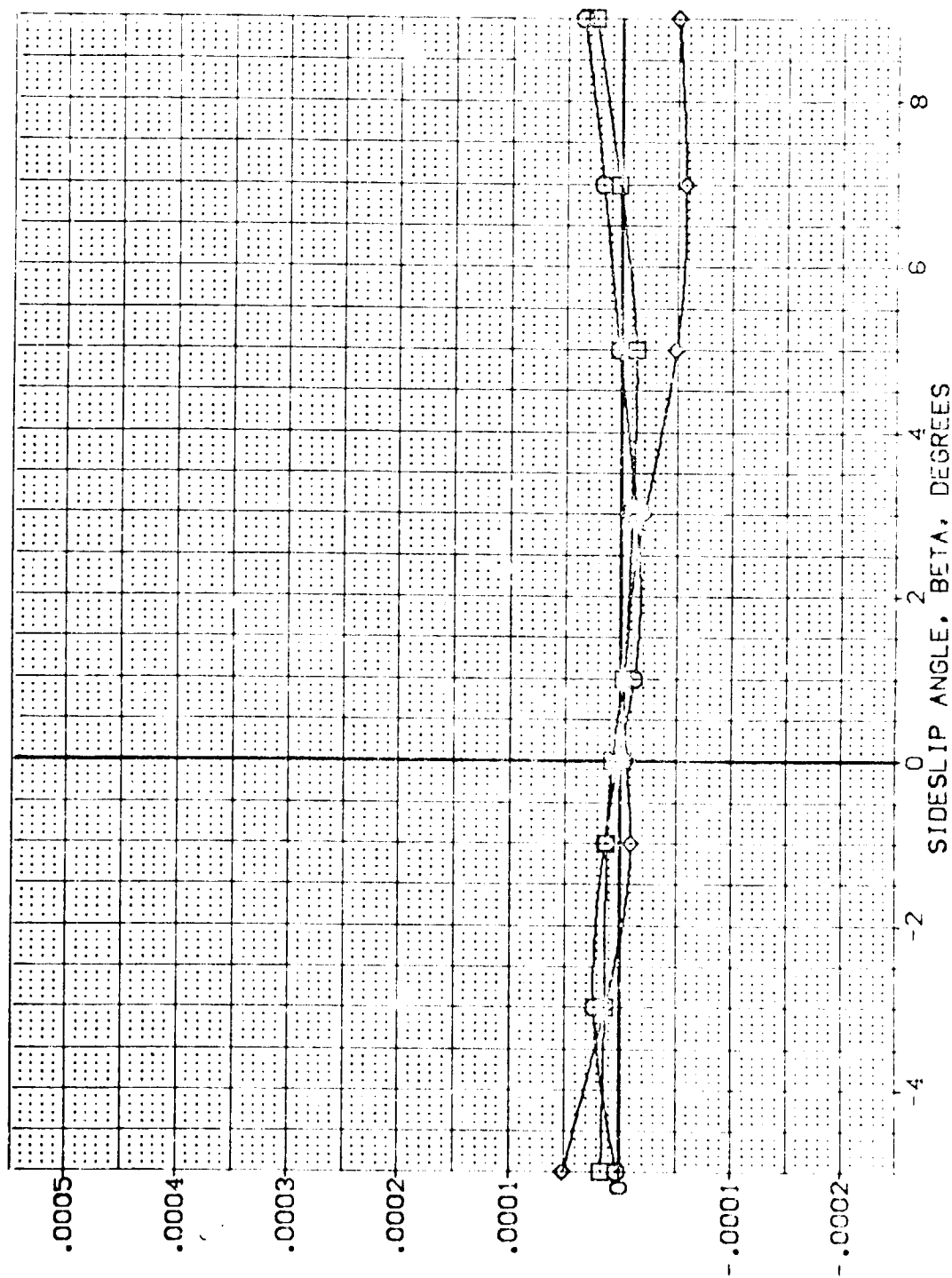


FIG. 29 SPEEDBRAKE DERIVATIVES, 85 DEGS. DEFLECT. (BASELINE = 25 DEGS.)

(A)MACH = .80



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	ELEVON	REFERENCE INFORMATION
(VEJ028)	ARC 11-747 OAS3A B C M F VI V	.000	.000	-11.700	.000	SREF 2.4210 SQ.FT.
(VEJ040)	ARC 11-747 OAS3A B C M F VI V	10.000	.000	-11.700	.000	LREF 14.2440 IN.
(VEJ041)	ARC 11-747 OAS3A B C M F VI V	20.000	.000	-11.700	.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

YAKING MOMENT COEFF. DERIV. WITH SPEED BRAKE DEFL., DCYNDS, PER DEG

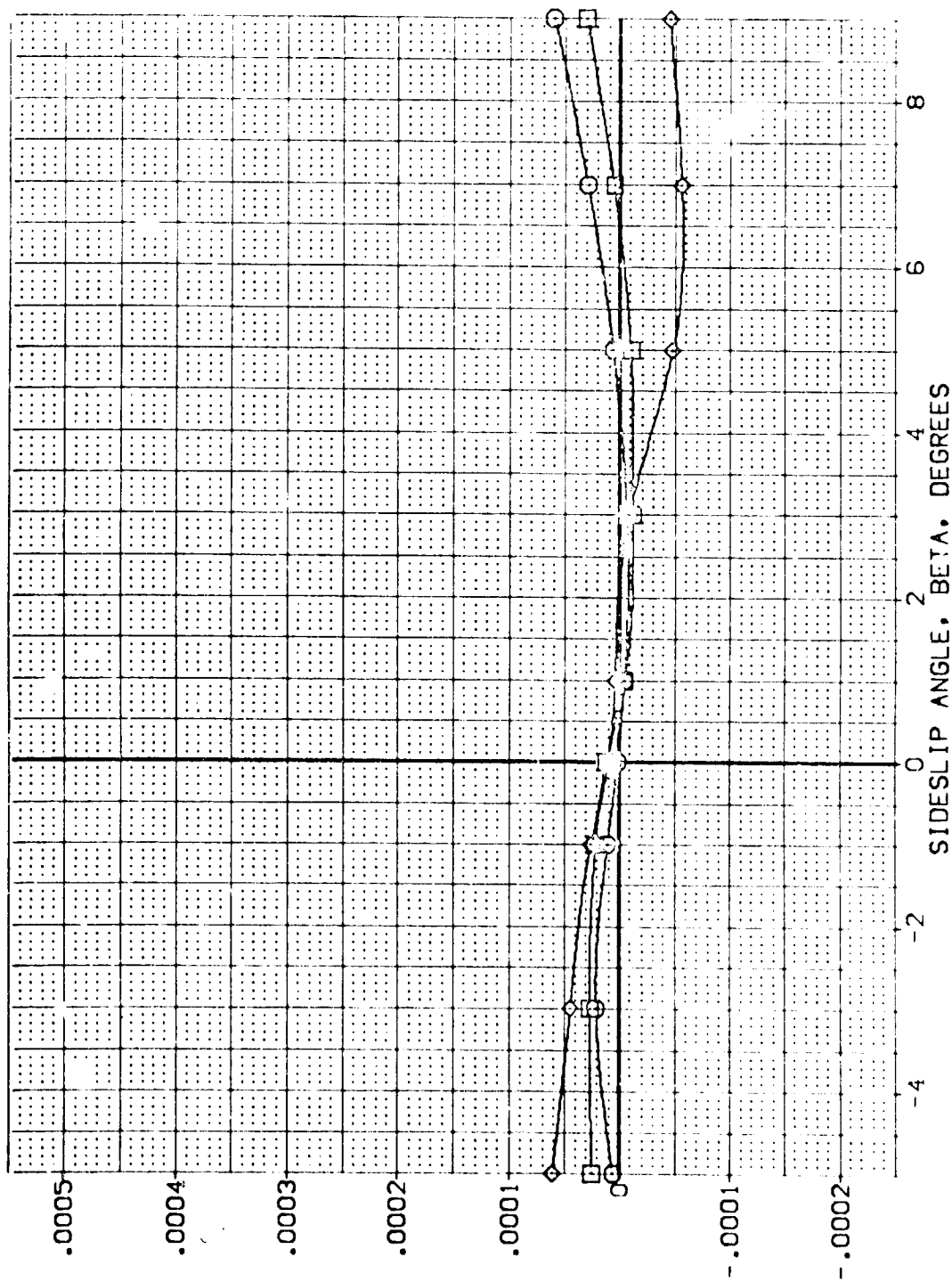


FIG. 29 SPEEDBRAKE DERIVATIVES, 85 DEGS. DEFLECT.(BASELINE = 25 DEGS.)

(B)MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BD FLAP	ELEVON	REFERENCE INFORMATION
(VEJ039)	ARC 11-747 BA53A B C H F VI V	.000	.000	-11.700	.000	SREF 2.4210 SQ.FT.
(VEJ040)	ARC 11-747 BA53A B C H F VI V	10.000	.000	-11.700	.000	LREF 14.2440 IN.
(VEJ041)	ARC 11-747 BA53A B C H F VI V	20.000	.000	-11.700	.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0330

YAWING MOMENT COEFF. DERIV. WITH SPEED BRAKE DEFL., DCYNDS. PER DEG

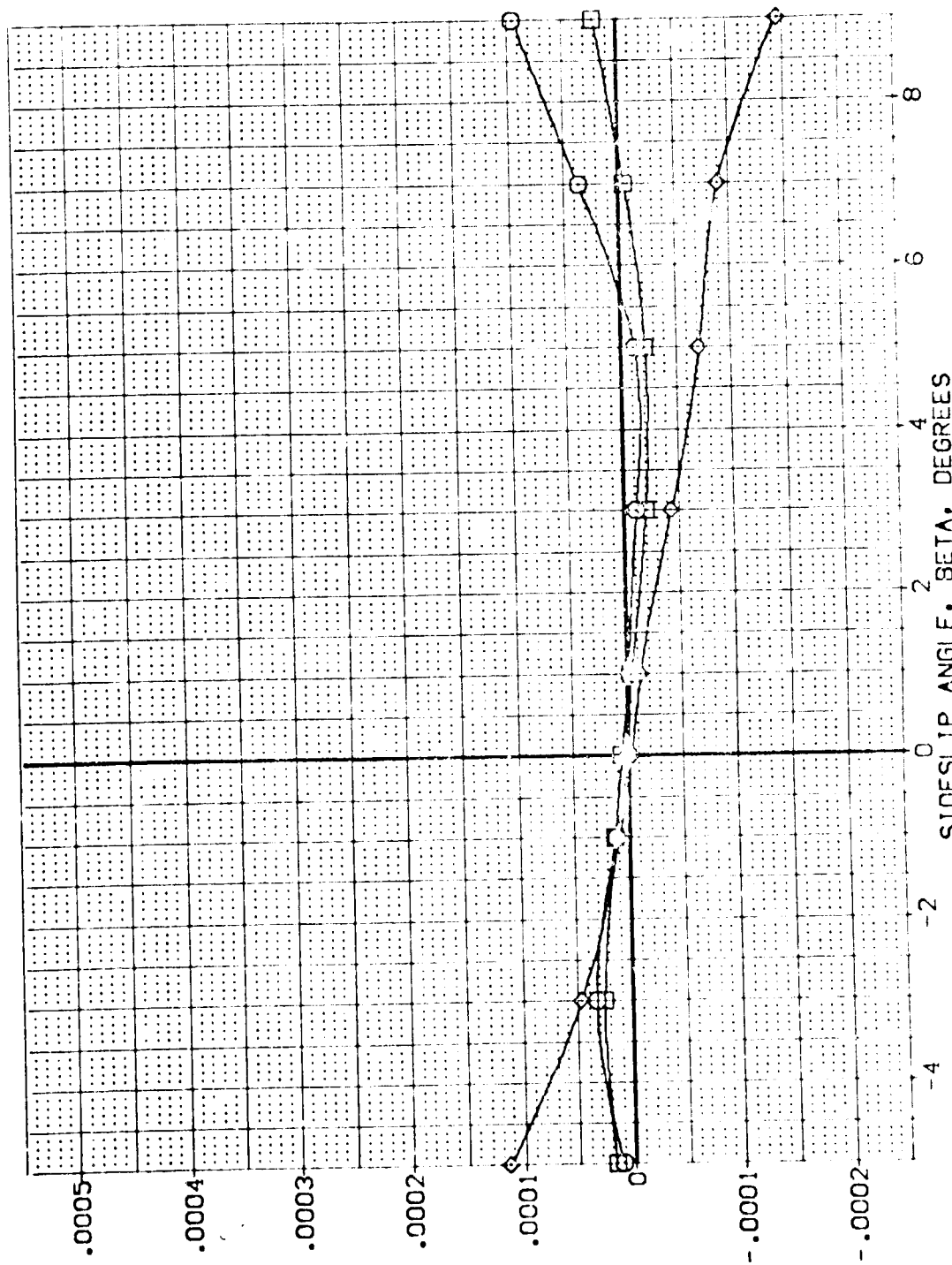


FIG. 29 SPEEDBRAKE DERIVATIVES, 85 DEGS. DEFLECT. (BASELINE = 25 DEGS.)

(C)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	80FLAP	ELEVON	REFERENCE INFORMATION
(VEJ038)	ARC 11-747 BAS3A B C M F VI V	.000	.000	-11.700	.000	SREF 2.4210 SQ.FT.
(VEJ040)	ARC 11-747 BAS3A B C M F VI V	10.000	.000	-11.700	.000	LREF 14.2440 IN.
(VEJ041)	ARC 11-747 BAS3A B C M F VI V	20.000	.000	-11.700	.000	BREF 28.1004 IN.
						XREF 32.3010 IN.
						YREF .0000 IN.
						ZREF 11.2500 IN.
						SCALE .0300

YAWING MOMENT COEFF. DERIV. WITH SPEED BRAKE DEFL., DCYNDS. PER DEG

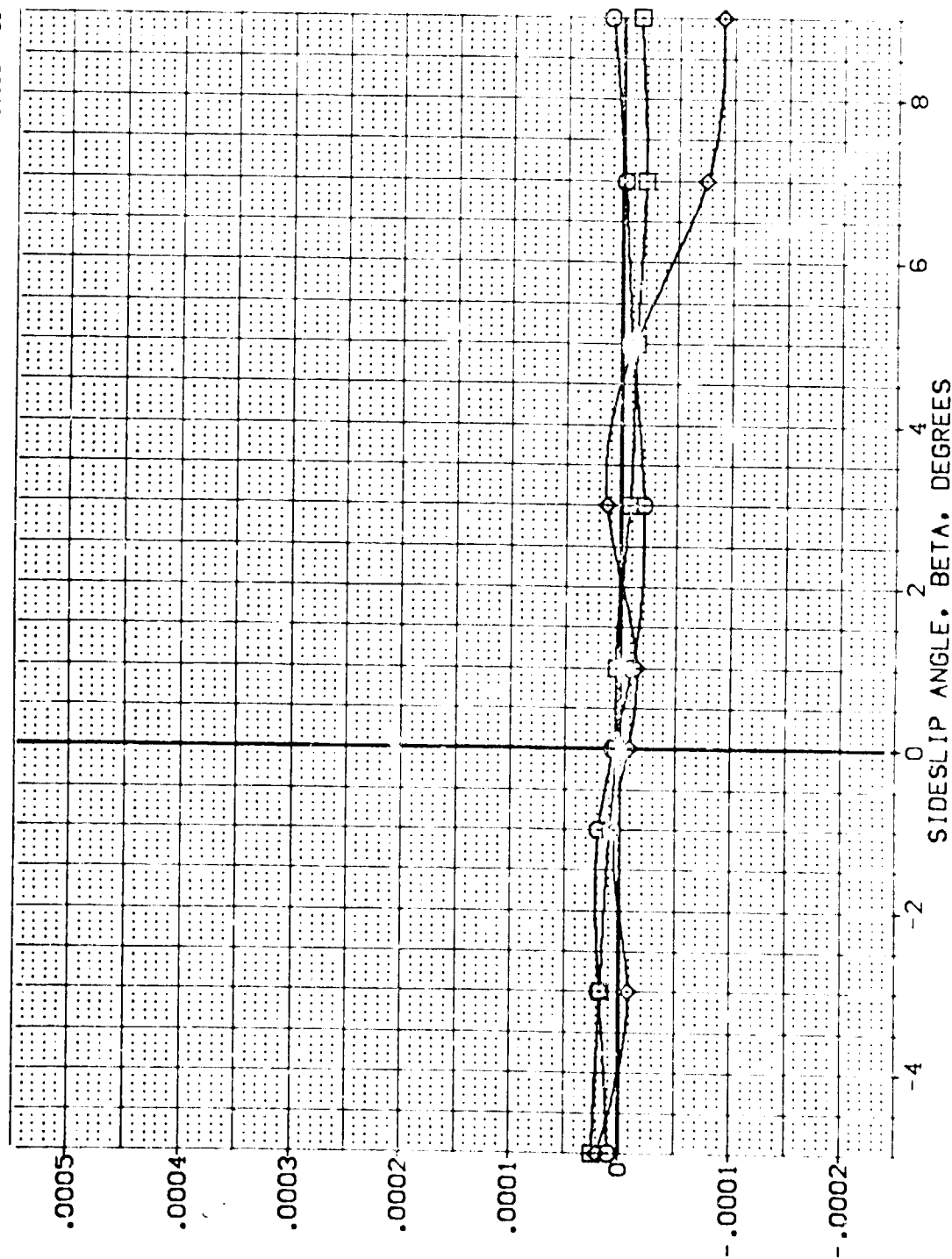
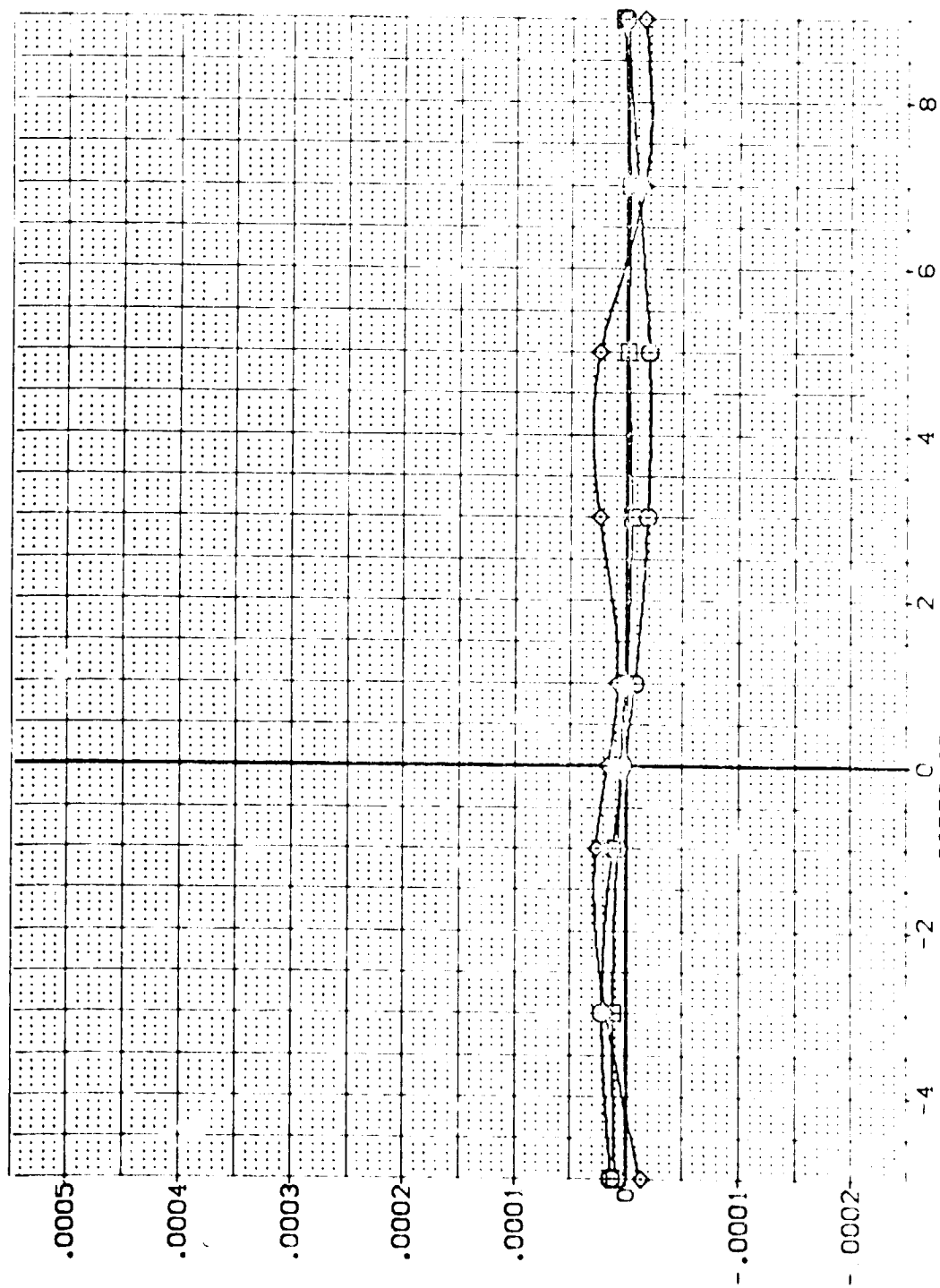


FIG. 29 SPEEDBRAKE DERIVATIVES, 85 DEGS. DEFLECT.(BASELINE = 25 DEGS.)

(D)MACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	ELEVON	REFERENCE INFORMATION
(VEJ038)	ARC 11-747 DA53A B C H F VI V	.000	.000	-11.700	.000	SREF 2.4210 SQ.FT.
(VEJ040)	ARC 11-747 DA53A B C H F VI V	10.000	.000	-11.700	.000	LREF 14.2440 IN.
(VEJ041)	ARC 11-747 DA53A B C H F VI V	20.000	.000	-11.700	.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300



YAWING MOMENT COEFF. DERIV. WITH SPEED BRAKE DEFL., DCYNDS. PER DEG

FIG. 29 SPEEDBRAKE DERIVATIVES, 85 DEGS. DEFLECT.(BASELINE = 25 DEGS.)

(E)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDER	BOFLAP	ELEVON	REFERENCE INFORMATION
(VEJ039)	ARC 11-747 OAS3A B C H F VI V	.000	.000	-11.700	.000	SREF 2.4210 SQ.FT.
(VEJ040)	ARC 11-747 OAS3A B C H F VI V	10.000	.000	-11.700	.000	LREF 14.2440 IN.
(VEJ041)	ARC 11-747 OAS3A B C H F VI V	20.000	.000	-11.700	.000	BREF 23.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0030

ROLLING MOMENT COEFF. DERIV. WITH SPEED BRAKE DEFL., DCBLDS. PER DEG



FIG. 29 SPEEDBRAKE DERIVATIVES, 85 DEGS. DEFLECT.(BASELINE = 25 DEGS.)

(A)MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	ELEVON	REFERENCE INFORMATION
(VEJ028)	ARC 11-747 BAS3A B C M F VI V	.000	.000	-11.700	.000	SREF 2.4210 SQ.FT.
(VEJ040)	ARC 11-747 BAS3A B C M F VI V	10.000	.000	-11.700	.000	LREF 14.2440 IN.
(VEJ041)	ARC 11-747 BAS3A B C M F VI V	20.000	.000	-11.700	.000	BREF 28.1004 IN.
						XTRP 32.3010 IN.
						YTRP .0000 IN.
						ZTRP 11.2500 IN.
						SCALE .0300

ROLLING MOMENT COEFF. DERIV. WITH SPEED BRAKE DEFL. DCLDS. PER DEG

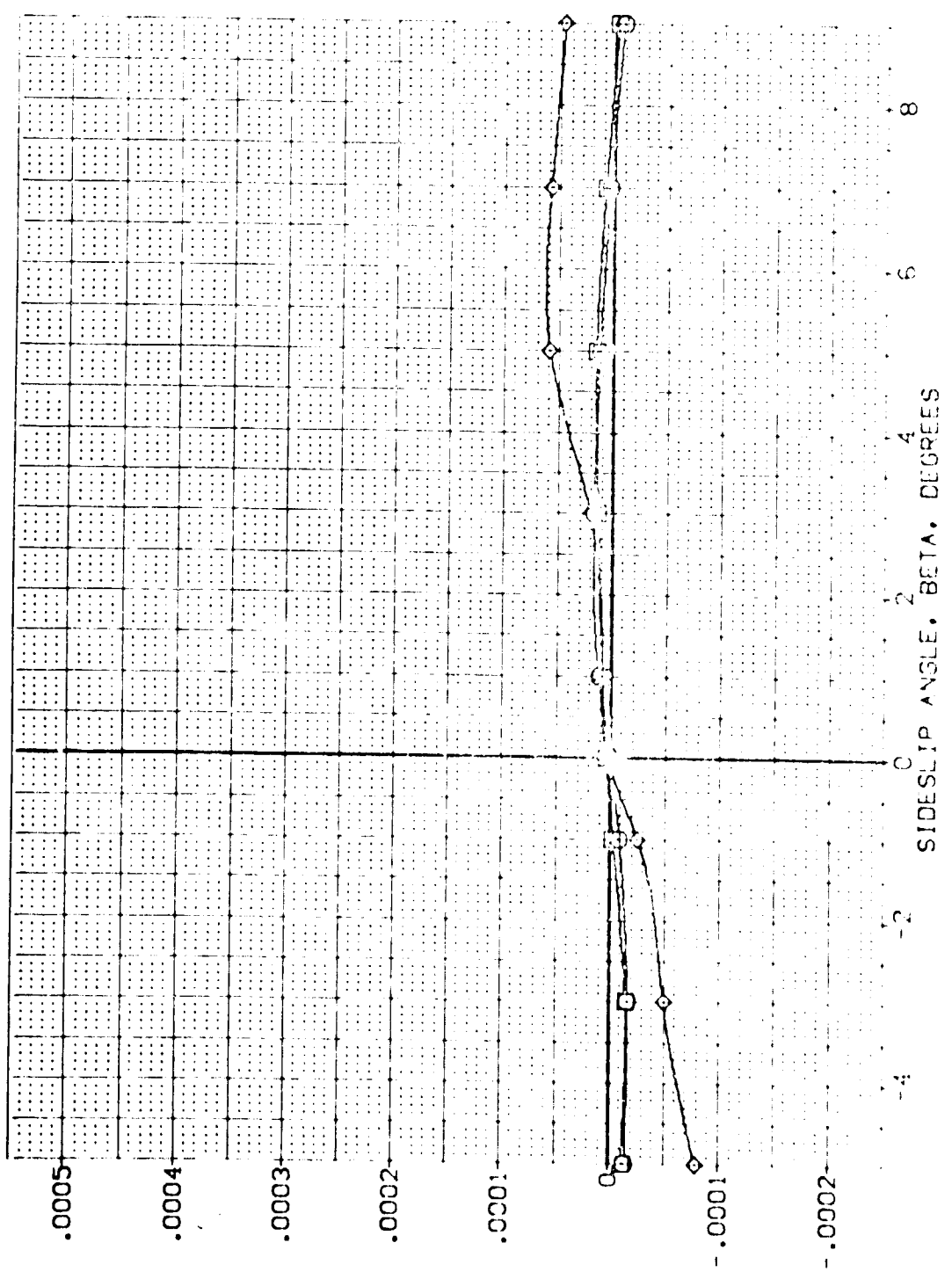


FIG. 29 SPEEDBRAKE DERIVATIVES, 85 DEGS. DEFLECT.(BASELINE = 25 DEGS.)

(B)WAC-180

ROLLING MOMENT COEFF. DERIV. WITH SPEED BRAKE DEFL., DCBLDS. PER DEG

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	ELEVON	REFERENCE INFORMATION
(VEJ008)	ARC 11-747 QAS3A B C H F V1 V	.000	.000	-11.700	.000	SREF 2.4210 SQ.FT.
(VEJ010)	ARC 11-747 QAS3A B C H F V1 V	10.000	.000	-11.700	.000	LREF 14.2440 IN.
(VEJ011)	ARC 11-747 QAS3A B C H F V1 V	20.000	.000	-11.700	.000	BREF 28.1004 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0000

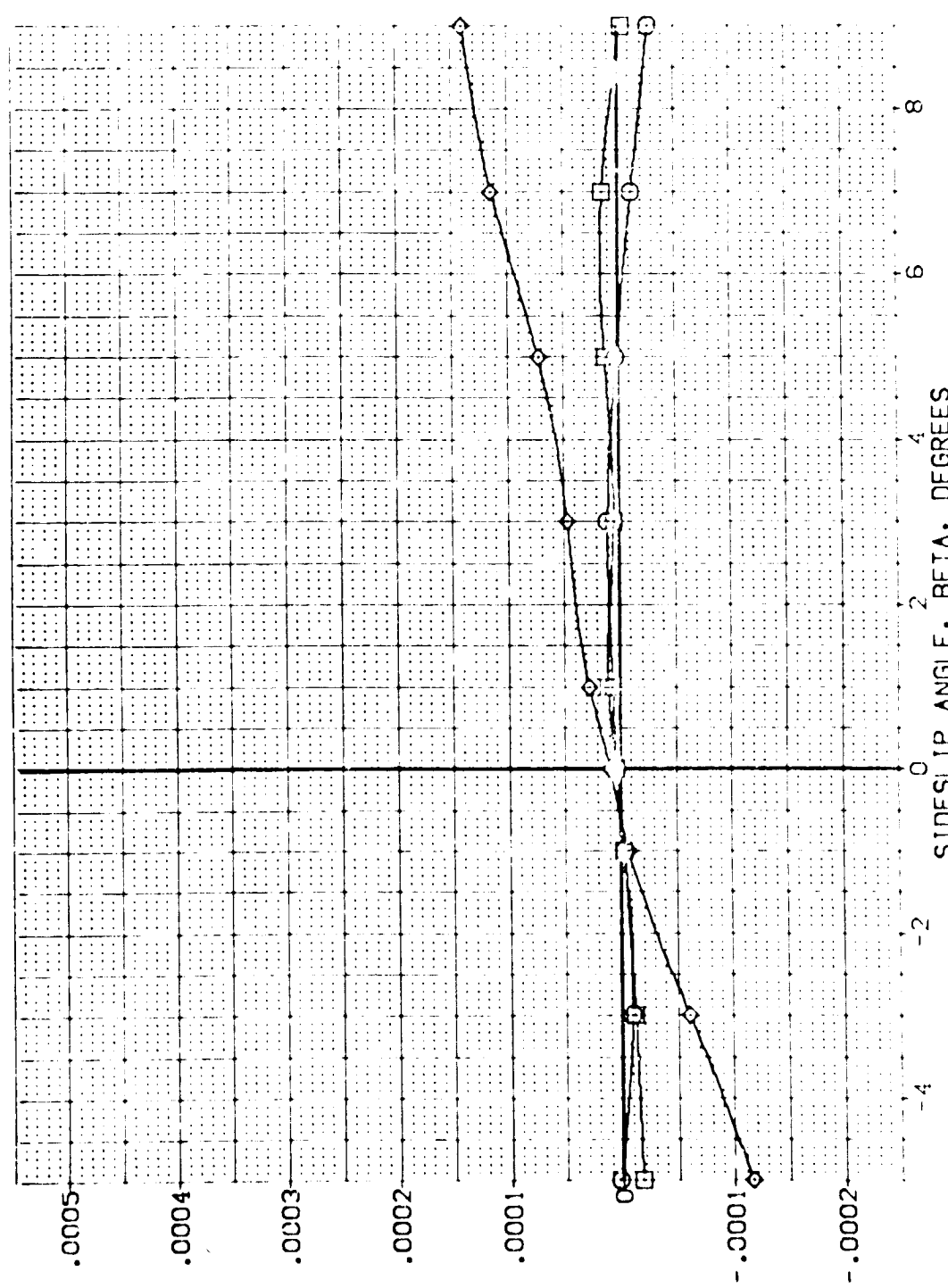


FIG. 29 SPEEDBRAKE DERIVATIVES, 85 DEGS. OFFLECT. (BASELINE = 25 DEGS.)

COMACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	ELEVON	REFERENCE INFORMATION
(VEJ008)	ARC 11-747 DASSA B C H F VI V	.000	.000	-11.700	.000	SREF 2.4210 SQ.FT.
(VEJ010)	ARC 11-747 DASSA B C H F VI V	10.000	.000	-11.700	.000	LREF 14.2440 IN.
(VEJ041)	ARC 11-747 DASSA B C H F VI V	20.000	.000	-11.700	.000	BREF 28.1004 IN.
						XREF 32.3010 IN.
						YREF .0000 IN.
						ZREF 11.2500 IN.
						SCALE .0000

ROLLING MOMENT COEFF. DERIV. WITH SPEED BRAKE DEFL., DCBLDS. PER DEG

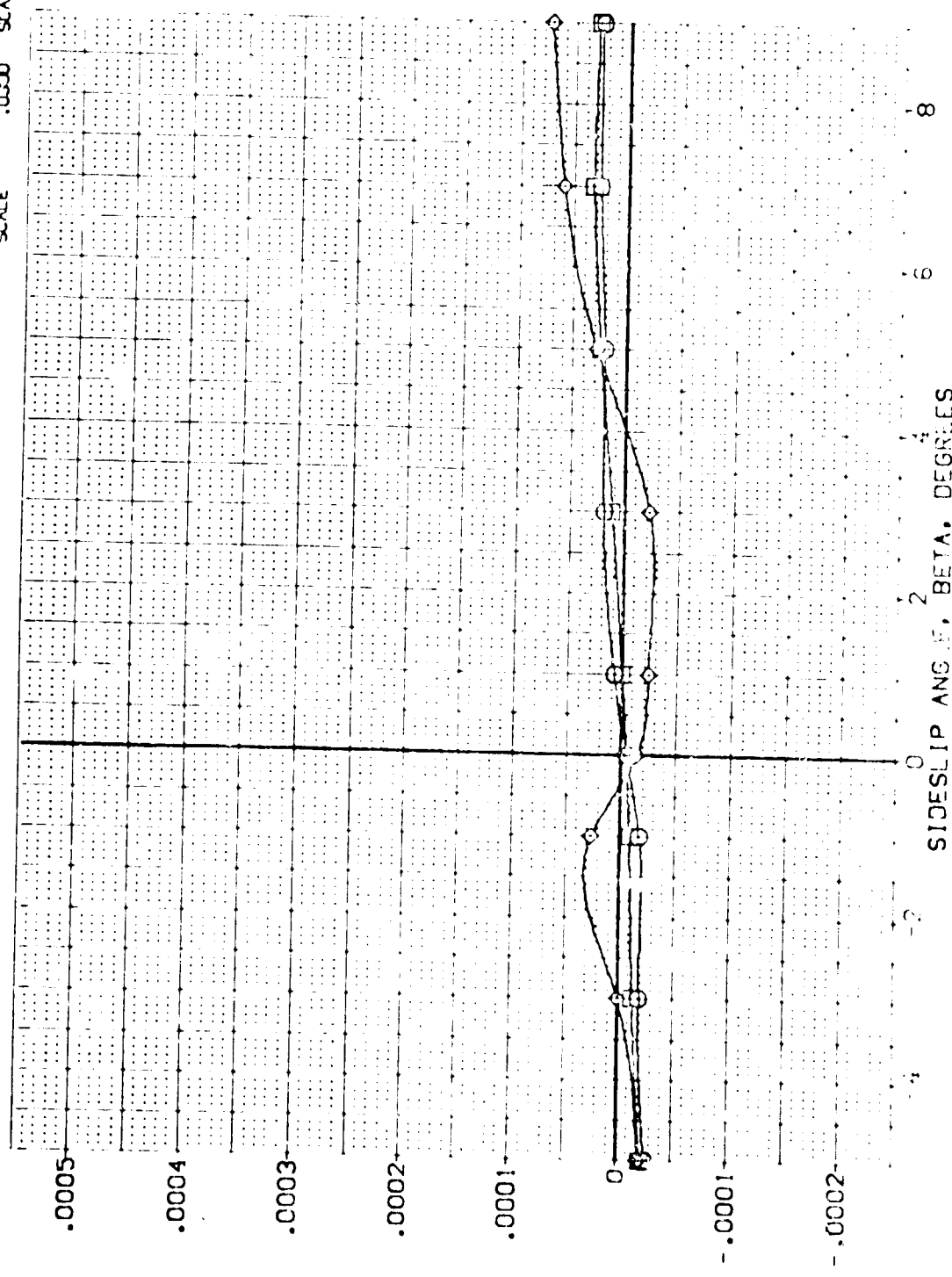


FIG. 29 SPEEDBRAKE DERIVATIVES, 85 DEGS. DEFLECT. (BASELINE = 25 DEGS.)

(COMAC) = 1.05



ROLLING MOMENT COEFF. DERIV. WITH SPEED BRAKE DEFL., DCBLDS, PER DEG

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	ELEVON	REFERENCE INFORMATION
(VEJ038)	ARC 11-747 BA53A B C M F VI V	.000	.000	-11.700	.000	SREF 2.4210 50.FT.
(VEJ040)	ARC 11-747 BA53A B C M F VI V	10.000	.000	-11.700	.000	LREF 14.2440 IN.
(VEJ041)	ARC 11-747 BA53A B C M F VI V	20.000	.000	-11.700	.000	BREF 28.1004 IN.
						YREF 32.3010 IN.
						ZREF 11.0000 IN.
						ZMRP 11.2300 IN.
						SCALE .0300

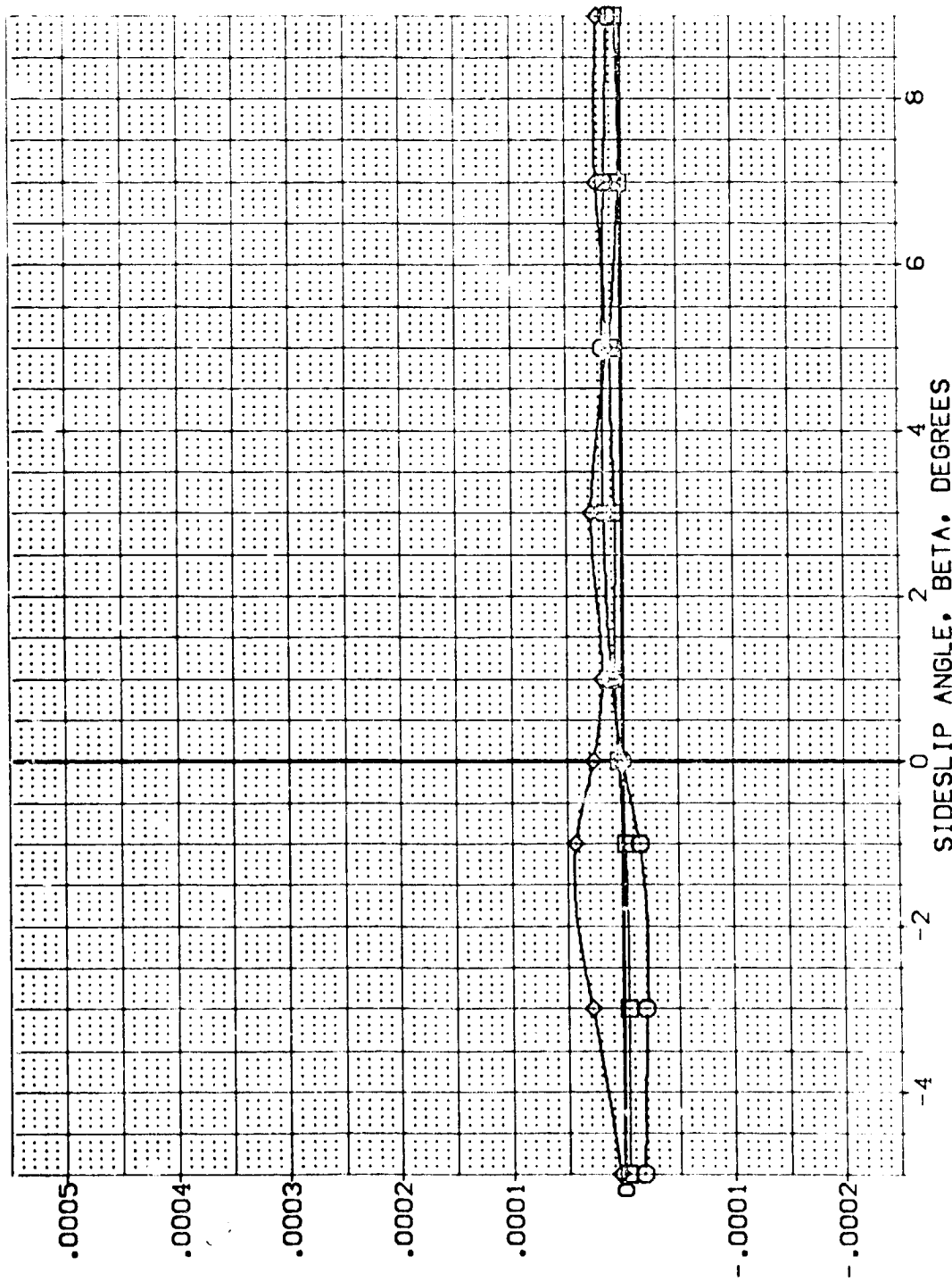


FIG. 29 SPEEDBRAKE DERIVATIVES, 85 DEGS. DEFLECT.(BASELINE = 25 DEGS.)

(C)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	ELEVON	REFERENCE INFORMATION
(VEJ028)	ARC 11-747 OAS3A B C M F VI V	.000	.000	-11.700	.000	SREF 2.4210 SQ.FT.
(VEJ040)	ARC 11-747 OAS3A B C M F VI V	10.000	.000	-11.700	.000	LREF 4.2440 IN.
(VEJ041)	ARC 11-747 OAS3A B C M F VI V	20.000	.000	-11.700	.000	BREF 28.1004 IN.
						XMPP 32.3010 IN.
						YMPP .0000 IN.
						ZMPP 11.2500 IN.
						SCALE .0000

PITCHING MOMENT COEFF. DERIV. WITH SPEED BRAKE DEFL., DCLMDS. PER DEG

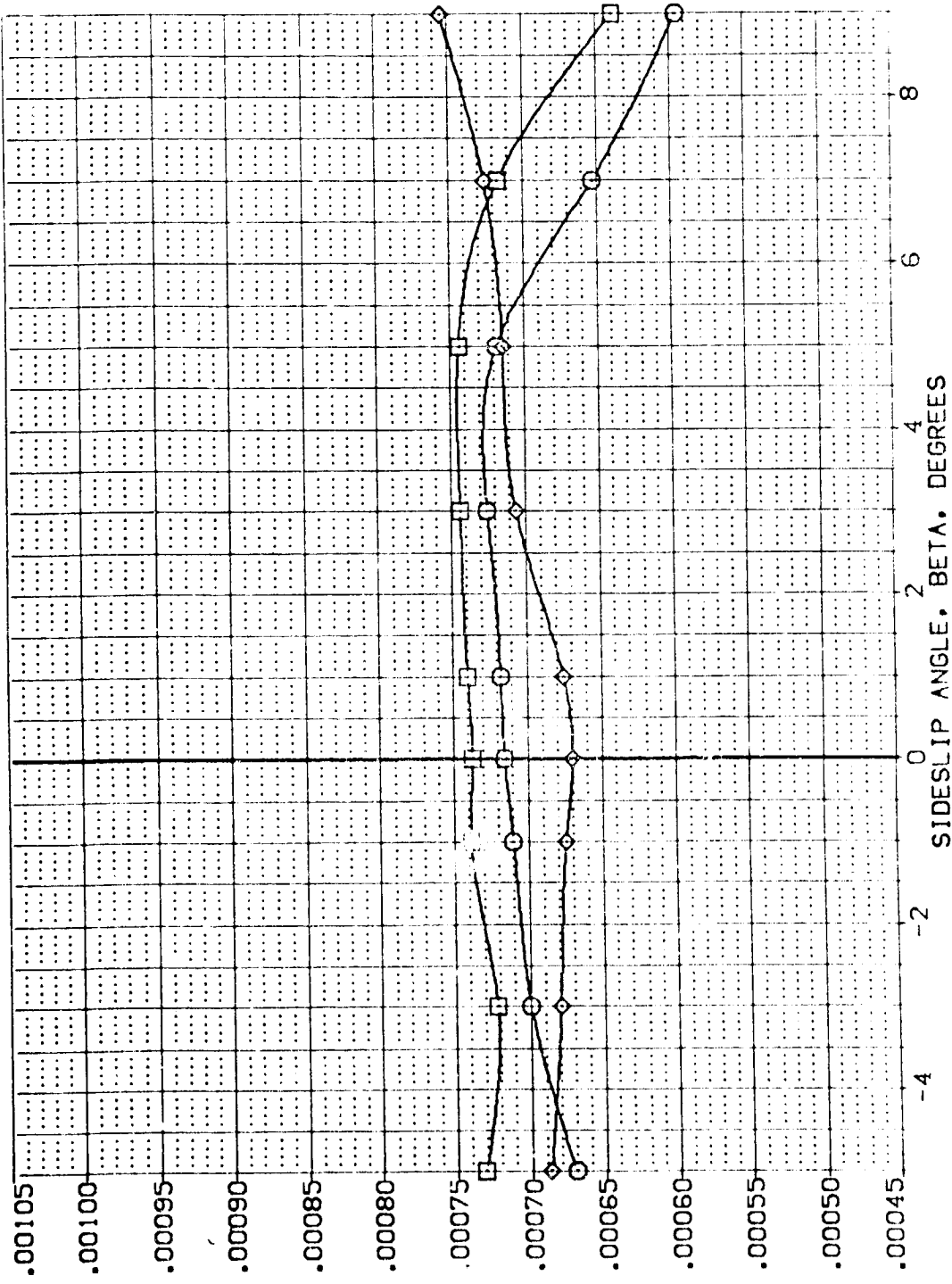
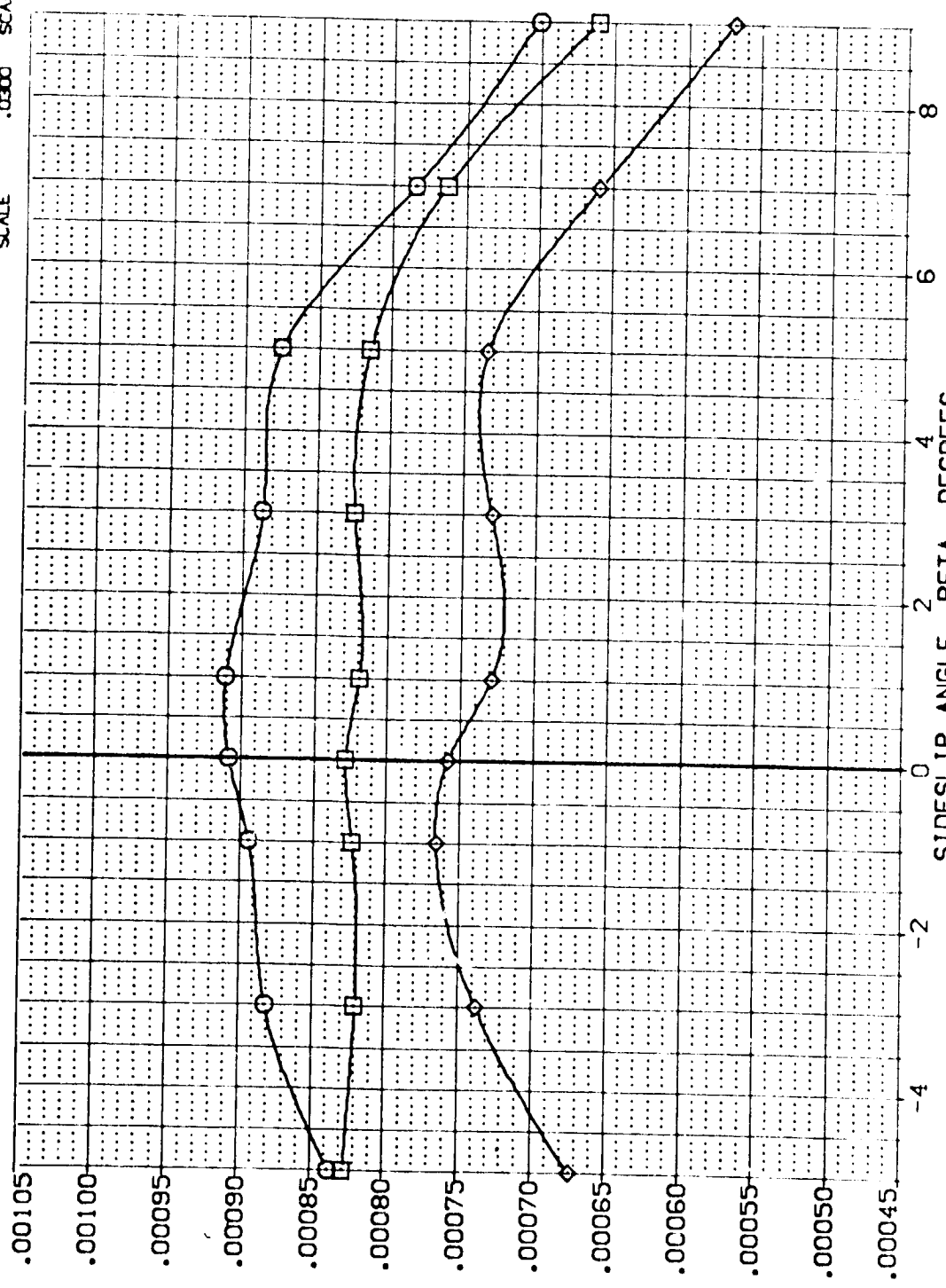


FIG. 29 SPEEDBRAKE DERIVATIVES, 85 DEGS. DEFLECT.(BASELINE = 25 DEGS.)

(A)MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	ELEVON	REFERENCE INFORMATION
(VEJ038)	ARC 11-747 DASSA B C M F VI V	.000	.000	-11.700	.000	SREF 2.4210 SQ.FT.
(VEJ040)	ARC 11-747 DASSA B C M F VI V	10.000	.000	-11.700	.000	LREF 14.2440 IN.
(VEJ041)	ARC 11-747 DASSA B C M F VI V	20.000	.000	-11.700	.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP 11.2500 IN.
						ZMRP 11.2500 IN.
						SCALE .0300



PITCHING MOMENT COEFF. DERIV. WITH SPEED BRAKE DEFL., DCLMDS, PER DEG. (B)MACH = .80

FIG. 29 SPEEDBRAKE DERIVATIVES, 85 DEGS. DEFLECT.(BASELINE = 25 DEGS.)

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	ELEVON	REFERENCE INFORMATION
(VEJ039)	ARC 11-747 BA53A B C H F VI V	.000	.000	-11.700	.000	SREF 2.4210 SQ.FT.
(VEJ040)	ARC 11-747 BA53A B C H F VI V	10.000	.000	-11.700	.000	LREF 14.2440 IN.
(VEJ041)	ARC 11-747 BA53A B C H F VI V	20.000	.000	-11.700	.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP 11.2000 IN.
						ZMRP 11.2000 IN.
						SCALE .0300

PITCHING MOMENT COEFF. DERIV. WITH SPEED BRAKE DEFL., DCLMDS. PER DEG

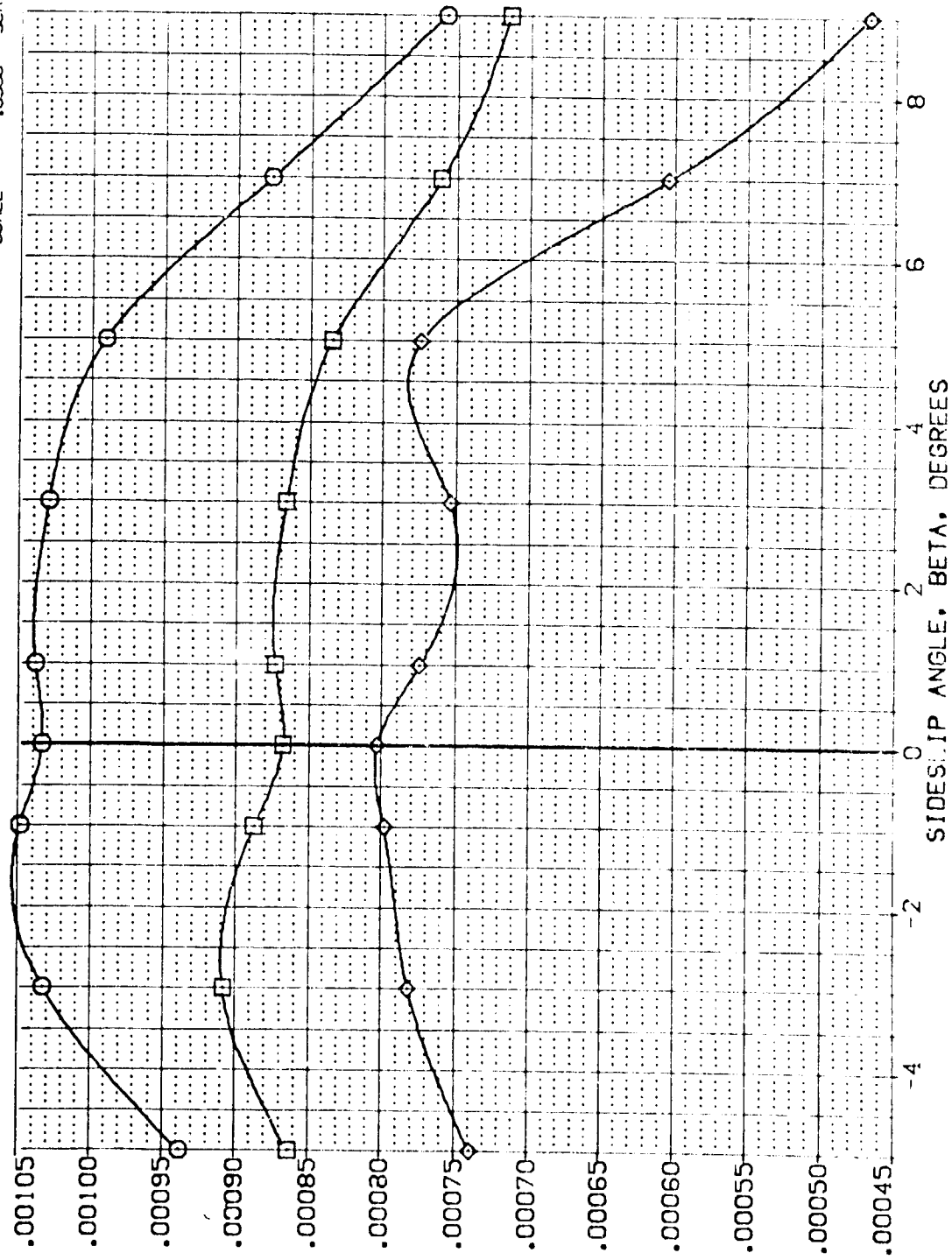


FIG. 29 SPEEDBRAKE DERIVATIVES, 85 DEGS. DEFLECT.(BASELINE = 25 DEGS.)

(C)MACH = .90

PITCHING MOMENT COEFF. DERIV. WITH SPEED BRAKE DEFLECT. DCLMDS. PER DEG

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	ELEVON	REFERENCE INFORMATION
(VEJ038)	ARC 11-747 QAS3A B C M F V1 V	.000	.000	-11.700	.000	SREF 2.4210 SQ.FT.
(VEJ040)	ARC 11-747 QAS3A B C M F V1 V	10.000	.000	-11.700	.000	LREF 14.2440 IN.
(VEJ041)	ARC 11-747 QAS3A B C M F V1 V	20.000	.000	-11.700	.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0000

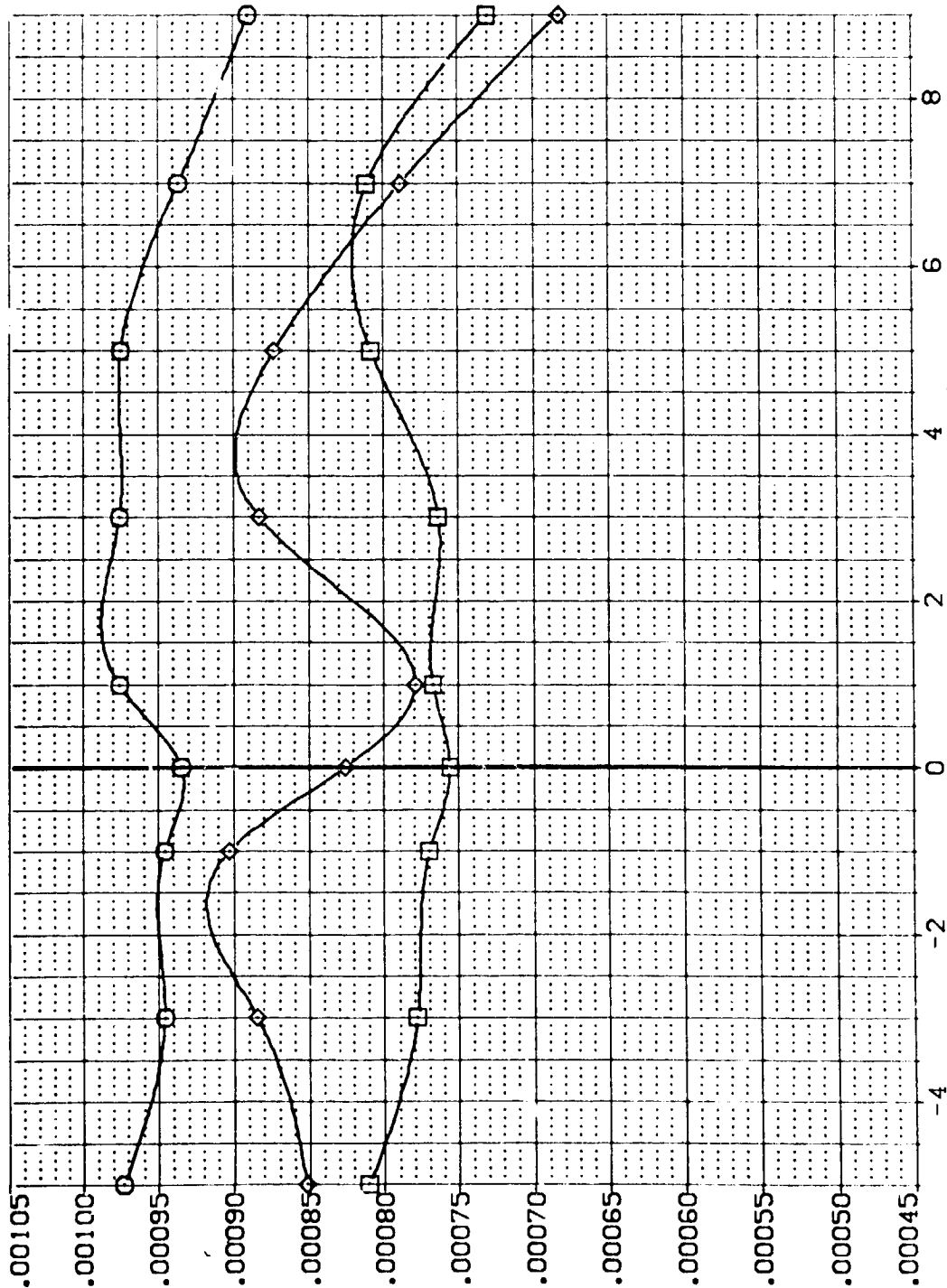


FIG. 29 SPEEDBRAKE DERIVATIVES, 85 DEGS. DEFLECT.(BASELINE = 25 DEGS.)

(D)MACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	ELEVON	REFERENCE INFORMATION
(VEJ038)	ARC 11-747 OAS3A B C M F VI V	.000	.000	-11.700	.000	SREF 2.4210 SQ.FT.
(VEJ040)	ARC 11-747 OAS3A B C M F VI V	10.000	.000	-11.700	.000	LREF 14.2440 IN.
(VEJ041)	ARC 11-747 OAS3A B C M F VI V	20.000	.000	-11.700	.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300
						SCALE

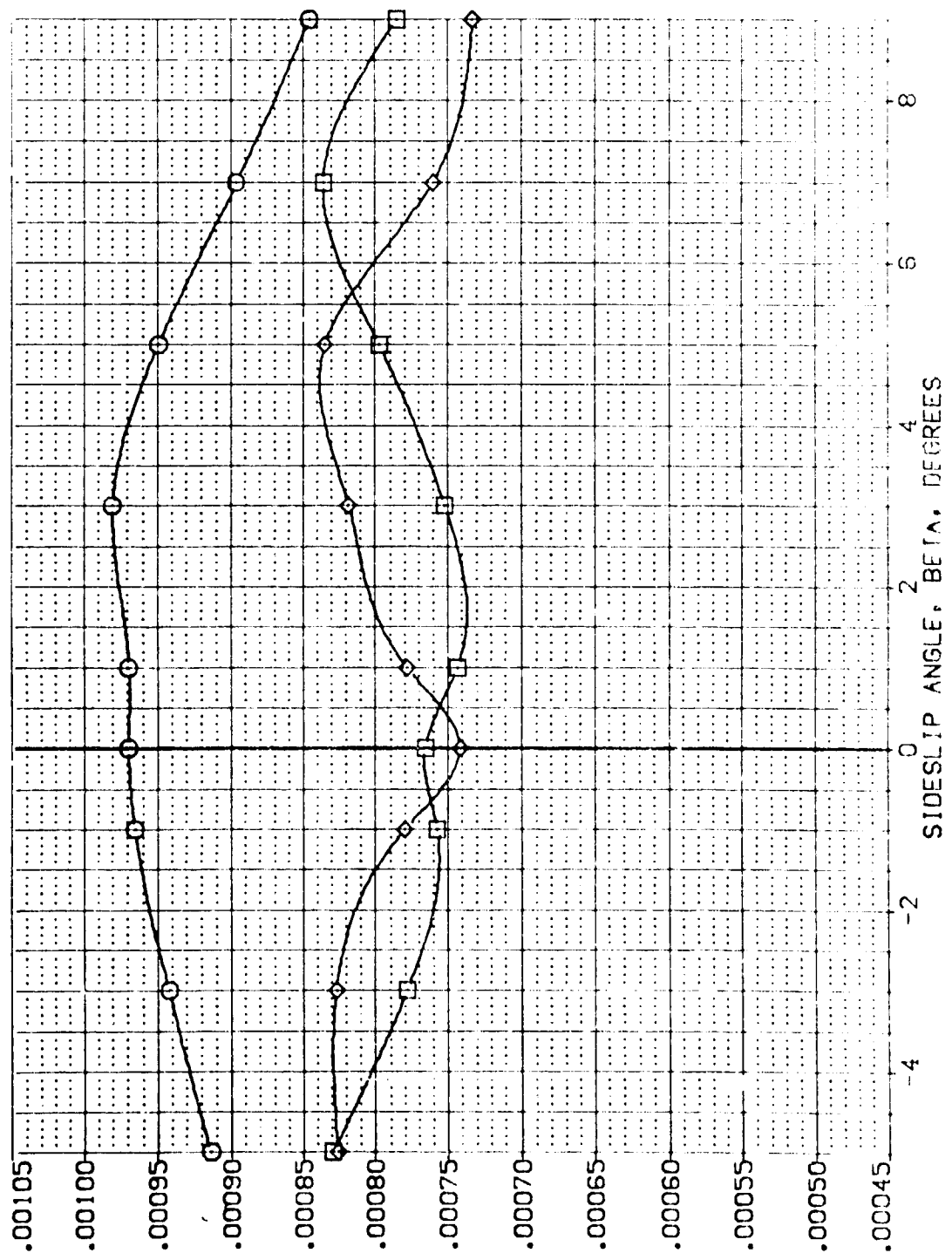


FIG. 29 SPEEDBRAKE DERIVATIVES, 85 DEGS. DEFLECT. (BASELINE = 25 DEGS.)

(E)MACH = 1.20